AEROMECHANICAL PROPERTIES OF EJECTION SEAT ESCAPE SYSTEMS

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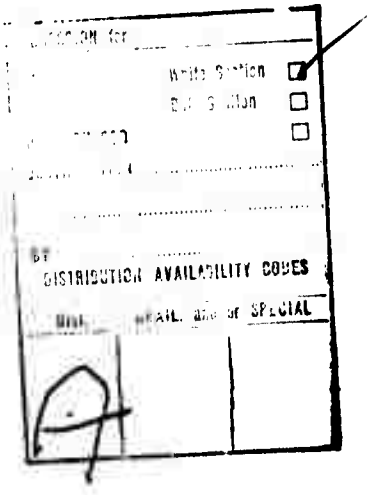

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Valid prediction of combat aircraft ejection seat performance has been impossible because of the lack of technical data on its basic physical properties and aerodynamic characteristics. Wind tunnel tests were conducted using a full scale F-101 ejection seat and a half scale F-106 ejection seat to determine the aerodynamic characteristics. Data were obtained at free stream Mach numbers of 0.2, 0.4, 0.6 and 0.8 for the full scale model and 0.6, 0.9, 1.2 and 1.5 for the half scale model. Angle of attack was varied from 0 to 360 degrees for

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the half scale model and -45 and +90 degrees for the full scale model. Yaw angles were varied on both models from 0 to 45 degrees. During the half scale model tests the shape of the rocket catapult exhaust plume was simulated by using high pressure air. Complete ejection seat force and moment coefficients for both rocket-on and rocket-off are presented in tabular form. These data obtained using the two models along with previously obtained data on the B-47 downward seat are compared. From this comparison it is evident that the size and shape of an ejection seat wind tunnel model does not have an appreciable effect on the aerodynamic coefficients. The data presented can be used for performance analysis during ejection seat design activities for any ejection seat configuration.

Ejection seat physical properties, such as frontal projected area, weight and center of gravity location, with respect to the seat reference point of several existing ejection seats containing both 5th and 95th percentile dummies were determined. Using these parameters in conjunction with the tabulated aerodynamic coefficients the means for application to performance analysis is developed.

Investigation into the effect of Mach number, rocket catapult exhaust, crewmember hand position and altitude on the force and moment coefficients were conducted.

It was determined that Mach number does influence the force coefficients but not moment coefficients. Altitude only affects the aerodynamic coefficients when the rocket is burning. This is primarily due to the expanding plume shape at increasing altitude. The crewmembers hand position on either the arm rest, "D" ring or face curtain ejection initiation control does affect the force coefficients especially in the vicinity of zero angle of attack. Hand position effect on the moment coefficients is negligible.

FOREWORD

This report was prepared by the Recovery and Crew Station Branch of the Air Force Flight Dynamics Laboratory (AFFDL/FER), Vehicle Equipment Division, Air Force Systems Command, Wright-Patterson AFB, Ohio, under Project 6065, "Aerospace Vehicle Recovery and Escape Subsystems", Work Unit 60650115, "Determination of Aerodynamic Characteristics of an Ejection Seat Emergency Escape System for Air Force Combat Aircraft". The work covered in this report was initiated in June 1969 and completed in January 1972. The report was submitted in December 1973.

Wind tunnel tests were conducted in the 16 foot Transonic Wind Tunnel of the Propulsion Wind Tunnel Facility at the Arnold Engineering Development Center (AEDC), Arnold Air Force Station, Tennessee, as an in-house effort under the direction of Project Engineer Bobby J. White.

Full scale ejection seat tests were also conducted but were sponsored by the San Antonio Air Material Area (SAAMA), Kelly Air Force Base, Texas. The half scale ejection seat wind tunnel model was designed and fabricated by Weber Aircraft, Burbank, California, under USAF Contract No. F33615-67-C-1272. The sting support system was designed by ARO, Inc., contract operators of the AEDC, and fabricated by Process Equipment Company, Tipp City, Ohio.

Special acknowledgement is made to Mr. David Reichenau, Mr. Lawrence Galigher, Mr. K. F. Thormachlen, and Mr. T. L. Kennedy of ARO, Inc., for their assistance and cooperation during planning, preparation, and conducting the wind tunnel tests.

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LIST OF SYMBOLS

C_A	Original Data Axial Force Coefficient ($-C_X$)
C_N	Original Data Normal Force Coefficient ($-C_Z$)
C_X	Axial Force Coefficient, Moment Reference Center About Seat Reference Point = F_X/qS
C_Y	Side Force Coefficient, Moment Reference Center About Seat Reference Point = F_Y/qS
C_Z	Normal Force Coefficient, Moment Reference Center About Seat Reference Point = F_Z/qS
C_ℓ	Rolling Moment Coefficient, Moment Reference Center About Seat Reference Point = M_ℓ/qSd
C_m	Pitching Moment Coefficient, Moment Reference Center About Seat Reference Point = M_m/qSd
C_n	Yawing Moment Coefficient, Moment Reference Center About Seat Reference Point = M_n/qSd
$C_{X_{CG}}$	Axial Force Coefficient, Moment Reference Center About Seat Center of Gravity
$C_{Y_{CG}}$	Side Force Coefficient, Moment Reference Center About Seat Center of Gravity
$C_{Z_{CG}}$	Normal Force Coefficient, Moment Reference Center About Seat Center of Gravity
$C_{\ell_{CG}}$	Rolling Moment Coefficient, Moment Reference Center About Seat Center of Gravity
$C_{m_{CG}}$	Pitching Moment Coefficient, Moment Reference Center About Seat Center of Gravity
$C_{n_{CG}}$	Yawing Moment Coefficient, Moment Reference Center About Seat Center of Gravity
c_p/c_v	Ratio of Rocket Exhaust Fluid Specific Heats
d	Model Reference Length, also hydraulic diameter, $\sqrt{4S/\pi}$
F_A	Original Data Axial Force ($-F_X$)
F_N	Original Data Normal Force ($-F_Z$)

F_X	Axial Force, Moment Reference Center About Seat Reference Point, lb
F_Y	Side force, Moment Reference Center About Seat Reference Point, lb
F_Z	Normal Force, Moment Reference Center About Seat Reference Point, lb
$F_{X_{CG}}$	Axial Force, Moment Reference Center About Seat Reference Point, lb
$F_{Y_{CG}}$	Side Force, Moment Reference Center About Seat Center of Gravity, lb
$F_{Z_{CG}}$	Normal Force, Moment Reference Center About Seat Center of Gravity, lb
M	Free-Stream Mach Number
M_ℓ	Rolling Moment, Moment Reference Center About Seat Reference Point, ft-lb
M_m	Pitching Moment, Moment Reference Center About Seat Reference Point, ft-lb
M_n	Yawing Moment, Moment Reference Center About Seat Reference Point, ft-lb
$M_{\ell_{CG}}$	Rolling Moment, Moment Reference Center About Seat Center of Gravity, ft-lb
$M_{m_{CG}}$	Pitching Moment, Moment Reference Center About Seat Center of Gravity, ft-lb
$M_{n_{CG}}$	Yawing Moment, Moment Reference Center About Seat Center of Gravity, ft-lb
P_c	Rocket Nozzle Chamber Pressure, psf
P_∞	Free-Stream Static Pressure, psf
q	Free-Stream Dynamic Pressure, psf
S	Model Reference Area, ft^2
x	Transfer Distance Along X Axis from SRP to CG
y	Transfer Distance Along Y Axis from SRP to CG
z	Transfer Distance Along Z Axis from SRP to CG

$(\partial C_m/\partial \alpha)$	Slope of Pitching Moment Coefficient as a Function of Angle of Attack Curve
$(\partial C_n/\partial \psi)$	Slope of Yawing Moment Coefficient as a Function of Yaw Angle Curve
$(\partial C_\ell/\partial \psi)$	Slope of Rolling Moment Coefficient as a Function of Yaw Angle Curve
α	Angle of Attack, degrees
Ψ	Angle of Yaw, degrees
β	Angle of Sideslip ($-\Psi$), degrees
θ_N	Rocket Nozzle Semi-Divergence Angle, degrees

SECTION I

INTRODUCTION

This report presents basic ejection seat aeromechanical property data that can be incorporated into performance prediction activities regardless of the seat shape or occupant size of the escape system being analyzed.

A wind tunnel test program using a half scale F-106 ejection seat model containing a 50 percentile crewmember was undertaken in the Arnold Engineering Development Center's (AEDC) 16 foot Propulsion Wind Tunnel (PWT) facility to provide basic ejection seat aerodynamic data which included the effects of rocket exhaust, crew members hand position, altitude, and Mach number on the airflow about the seat. This program provided six component force and moment coefficients of an ejection seat for a complete 360 degrees angle of attack range at 5 degree increments, at discrete yaw angles of 0, 5, 10, 15, 30, and 45 degrees, with and without rocket simulation, three hand positions at pressure altitudes of sea level, 10,000, 20,000, 30,000, and 40,000 feet, and Mach numbers of 0.6, 0.9, 1.2, and 1.5.

An abbreviated wind tunnel test program was conducted using a full scale F-101 ejection seat model containing a 95 percentile dummy. The purpose of this program was to obtain data that could be compared with the half scale F-106 ejection seat data to test the postulation, held by many ejection seat designers, that only full scale data would be representative of actual ejection seat aerodynamic properties. This assumption, of course, necessitates a requirement that full scale wind tunnel tests be conducted during

the development of each new ejection seat. The full scale F-101 ejection seat provides a large ejection seat size and shape variation when compared with the F-106 seat. Aerodynamic force and moment coefficients were obtained for this full scale model at an angle of attack range from -45 to +90 degrees in 5 degree increments, at yaw angles of 0 to +45 degrees, depending on the angle of attack, and at free stream Mach numbers of 0.2, 0.4, 0.6, and 0.8. Effects of altitude, hand positions, and rocket exhaust were not investigated during this program.

Data at Mach 0.6 for both the full scale and half scale models along with previously obtained wind tunnel data on a 0.096 scale model of a B-47 downward ejection seat containing a crewmember of approximately 5 percentile (Reference 1) were compared. For this comparison all data were transferred to a similar back angle and a common moment reference point to provide a common reference for angle of attack and moment center, respectively.

The Appendix contains a tabulation of the transferred data obtained during the half scale model tests at Mach numbers of 0.6, 0.9, 1.2, and 1.5 for both rocket-off and rocket-on at sea level conditions and during the full scale model tests at Mach numbers of 0.2, 0.4, 0.6, and 0.8 for rocket-off conditions only. The method of applying these data to ejection seat performance analysis is developed in Section III.

SECTION II

WIND TUNNEL INVESTIGATION

1. TEST FACILITY

The Arnold Engineering Development Center's Propulsion Wind Tunnel (PWT) 16 foot transonic facility was used to conduct both the half scale and full scale wind tunnel tests. The facility is a closed circuit, continuous flow wind tunnel capable of being operated at Mach numbers from 0.2 to 1.6. The square test section is 16 feet in cross section and 40 feet long. The tunnel can be operated within a stagnation pressure range from 100 to 4,000 psfa depending on the Mach number. Stagnation temperature can be varied from approximately 80°F to a maximum of 160°F, and the specific humidity of the air is controlled by removing tunnel air and supplying conditional make-up air from an atmospheric dryer. A more complete description of the test facility and its operating characteristics is contained in Reference 2.

2. TEST ARTICLE

a. Half Scale Model

A half scale model representation of an F-106 ejection seat occupied by a 50th percentile crewmember in normal flying clothes and equipment, as shown in Figure 1, was used as the test article. The model design permitted a complete 360 degree angle of attack capability, rocket catapult exhaust simulation, and a method of changing the seat occupant's hand position to accommodate arm rest, "D" ring, or face curtain ejection controls.

(1) Model Support System - The model support system, especially designed and fabricated for this test program, is capable of providing

a model angle of attack range for 0 to 360 degrees. This is accomplished by using three different model to sting attachment points, and pitching the model through three segments of 120 degrees each with a remotely controlled hydraulic actuator. A sketch showing the sting support system and pitch capability is shown in Figure 2. The model yaw angles were achieved by rotating the complete model and support system about the vertical axis with a motor operated mechanism installed in the top wall of the test section for this purpose. The sting support system contained a 2.0 inch diameter hole down the center of each section to allow high pressure air to be transmitted to the rocket plenum chamber described below.

(2) Rocket Catapult Simulation - To investigate the effect the rocket catapult exhaust, or plume, has on the aerodynamic characteristics of an ejection seat, the F-106 half scale model was designed to provide a plenum chamber and rocket nozzle to simulate the plume shape. The rocket nozzle was positioned in the lower aft portion of the seat as can be seen in Figures 3 and 4, and was attached to the sting so that the rocket reaction force would be isolated from the model balance. The F-106 ejection seat 2174-518 rocket catapult was selected for model simulation. From References 3 and 4 it was determined that the simulation parameters that affect the plume shape expanding under quiescent atmospheric conditions are the nozzle exit angle (θ_N in Figure 5), the nozzle chamber pressure to tunnel static pressure ratio ($^{P_c}/_{p_\infty}$), the ratio of exhaust fluid specific heats ($^{c_p}/_{c_v}$), and the nozzle throat and exit diameters.

The above physical characteristics of the rocket catapult were determined from the rocket catapult selected for simulation. The nozzle chamber pressure was determined from typical pressure versus time records obtained during development tests.

The half scale model rocket nozzle was configured from the full scale rocket characteristics with the exception of nozzle exit angle and nozzle chamber pressure to tunnel pressure ratio. Since the ratio of the specific heats of the cold air used in the half scale model is different from the hot gases of the full scale rocket, the analysis showed that a different nozzle angle for each altitude should be used to adjust for the difference between the specific heat ratios and its effect on the Prandtl-Meyer flow relations. Five nozzles were therefore fabricated to simulate the plume shapes during rocket simulation tests at sea level, 10,000, 20,000, 30,000, and 40,000 feet. To operate the wind tunnel above the minimum limit and yet not exceed the load limit of the balance over the test velocity range of Mach 0.6 to 1.5, it was necessary to vary the model nozzle pressure from 450 psia to 2300 psia, depending on the altitude simulated. The maximum nozzle chamber pressure of 2300 psia corresponded to the limitations of the high pressure air supply. By proper adjustment of the pressure ratio and dynamic pressure for each test altitude and Mach number, it was possible to simulate the rocket plume shape within 0.33% of the full scale rocket shape (Reference 5). The nozzle details and simulation parameters used during the rocket catapult simulation is given in Figure 5. The design details are contained in Reference 5.

(3) Ejection Initiation Hand Position - USAF ejection seat's employ three different methods of accomplishing escape system initiation. They are, (1) "Arm Rest Controls, which are squeeze type handgrips on the forward portion of both sides of the seat bucket; (2) "D-Ring Control", which is a pull-type metal ring between the occupant's knees; and (3) "Face Curtain Control", which is a pull down type of control above the occupant's head. This latter type is primarily utilized by the U.S. Navy but is also used in the USAF F-4 aircraft.

Depending on the method employed in accomplishing escape initiation, the frontal area and aerodynamic shape of the ejection seat are altered. Therefore, the half scale model was designed to permit changing the arms to determine if there are any appreciable changes in aerodynamic characteristics that are attributable to changes in hand positions. The three hand positions representing the three methods of escape initiation are shown in Figure 6.

Hands on the arm rest control was the primary configuration used during the wind tunnel tests. A complete set of data at all Mach numbers, altitudes, and rocket simulation conditions were obtained using this configuration. Tests were then repeated using the two other hand position configurations excluding data from 120 to 240 degrees angle of attack range since the arms are shielded from the airstream in this region.

(4) Test Procedure - An internally mounted, six component, strain gage balance was used to measure model forces and moments. The balance data were recorded on the wind tunnel facility's automatic digital data system, corrected for weight tares and reduced

to coefficient form in the body axis system as shown in Figure 7a. The nozzle chamber pressure and temperature were measured with a 0 to 3000 psi gage transducer and a copper-constantan thermocouple, respectively. Television and motion picture cameras and a schlieren system were used to monitor and document the tests. The force and moment coefficients were based on a reference area equal to the model projected frontal area (1.73 ft^2) and a reference length of 24 inches.

Force and moment data were obtained for both rocket-off and rocket-on conditions while holding the Mach number constant and varying the model angle of attack at discrete model yaw angles. Any sting deflections caused by the rocket reaction force could be detected by a sting angle potentiometer and the desired position reset before data were collected. Complete sets of data were obtained at free stream Mach numbers of 0.6, 0.9, 1.2, and 1.5 through an angle of attack of 360 degrees at 5 degree increments at yaw angles of 0, 5, 10, 15, 30, and 45 degrees and at simulated altitudes of sea level, 10,000, 20,000, 30,000, and 40,000 feet. The dynamic pressure varied from 62 to 530 psf and the Reynolds number per foot varied from 0.48×10^6 to 2.40×10^6. The method of obtaining the test data is documented in Reference 6.

b. Full Scale Model

The test article was an actual F-101 ejection seat occupied by a 95th percentile articulated anthropomorphic dummy securely restrained in the seat using standard lab belt and shoulder harness as shown in Figures 8 and 9. The dummy was dressed in flight boots, helmet, and wore a backpack parachute. However, due to the high

potential for failure with cloth fabrics by fluttering in wind tunnel testing, the dummy was covered with tape and then silicone rubber was applied to provide a cloth texture. The arms and legs were then secured to the seat by metal straps. To prevent losing the face shield from wind blast, silicone rubber was placed between the helmet visor and the dummy's face. As can be seen in Figure 9 this fix was unsuccessful. Even though the dynamic pressure was never greater than 160 psf, the visor was lost after a few hours of testing. The rocket catapult was removed from the seat and the seat back was modified for force-balance attachment to a sting support system.

(1) Model Support System - A flange-face couple attached to the rear of the full scale seat, as shown in Figure 10, provided the model to sting support system connections. This type of model to sting attachment provided the capability to pitch the seat through an angle of attack range from -45 to +90 degrees. Model yaw angle capability was achieved by a combination of sting pitch angle and roll angle. This type of support system reduces the amount of sting exposed to wind stream flowing around the seat; however, it also reduces the angle of attack capability appreciably.

(2) Test Procedure - A six component, strain gage balance was used to measure model forces and moments. The balance data were recorded on the wind tunnel facility's automatic digital data system. The force and moment data were corrected for weight tares and reduced to coefficient form in the body axis system as shown in Figure 7b. The moment coefficients were referred to the center of gravity as the moment reference center located as shown in Figure 7b.

The force and moment coefficients were based on a reference area equal to the model projected frontal area of 8.25 ft^2 and a reference length equal to the diameter of a circle whose area is equal to the model projected frontal area, normally referred to as hydraulic diameter (38.89 inches for this configuration).

The F-101 ejection seat was tested at free stream Mach numbers of 0.2, 0.4, 0.6, and 0.8 through an angle of attack range from -45 to +90 degrees at 5 degree increments. The model yaw angle was varied from 0 to 45 degrees in 5 degree increments depending on the angle of attack. Because of the large size of the model and the strain gage balance capability, the data for Mach numbers of 0.4, 0.6 and 0.8 was obtained at a maximum free stream dynamic pressure of 160 psf. At higher dynamic pressures the balance capability was exceeded. The Mach 0.2 data were obtained at a simulated sea level dynamic pressure of 59 psf. The effect of Reynolds number on the model aerodynamic characteristics was also investigated. A description of the tests and methods of obtaining the data are documented in Reference 7.

SECTION III

DATA REDUCTION

1. STANDARDIZATION OF VARIABLES

a. Original Data Reduction Variables

During the data analysis phase of this program an attempt was made to compare ejection seat wind tunnel data obtained during half scale model tests, full scale model tests, and previously conducted 0.096 model tests. However, the constants used during data reduction were different for each program. These variations were:

(1) Moment Reference Center - In all three test programs the seat-man center of gravity was chosen as the moment reference center. However, it can be seen in Figure 11 that when the three seat buckets have been superimposed, the three C.G. positions do not coincide. This is attributed to the difference in shape and weight of each seat and different size occupant in each case. The size of the crewmember used for the B-47 seat was not specified in Reference 1, but it appears from body dimensions to be approximately 5th percentile. The size of the crewmembers used in the F-106 and F-101 ejection seat tests were 50th and 95th percentiles, respectively.

(2) Axis System - Both the half scale and 0.096 scale ejection seat wind tunnel model's axis reference systems are identical. However, as shown in Figure 7, when the half scale and 0.096 scale model pitch angle is zero the full scale model pitch angle would be 6 degrees.

(3) Projected Frontal Area - The reference area used for data reduction for both the half scale and 0.096 scale model tests

was the projected frontal area of the seat and did not include the occupant's protruding extremities. The full scale model reference area did include the protruding elbows and feet. To obtain the full scale model projected frontal area, the seat containing the 95th percentile dummy was laid on its back, with the seat back parallel to the floor, and the outline traced on a large sheet of paper by the use of a plumb bob. The outlined area was then measured by a planimeter.

(4) Reference Length - The model reference length for the half scale and 0.096 scale models was arbitrarily chosen as the maximum height of the model excluding the legs. The full scale model reference length was defined as the hydraulic diameter of the model which in turn is defined as a diameter of a circle, d, whose area, S, is equal to the projected area of the seat-man combination, i.e., $\sqrt{\frac{4S}{\pi}}$.

b. Standardized Data Reduction Variables

Before a true comparison could be accomplished and the resulting data could be used to analyze the performance of any ejection seat, regardless of size or shape, each of the above variables had to be standardized. Table I summarizes the converted variables. The following procedures were used in selecting these standard variables:

(1) Moment Reference Center - If basic ejection seat force and moment coefficients are to be incorporated into performance prediction activities regardless of the shape or size of the seat or size of the seat occupant, a moment reference center that is common to all ejection seats must be chosen. Force and moment coefficients referred to this common moment reference center can then be transferred to the seat-man center of gravity location of any seat being analyzed. Since the Seat Reference Point (SRP) is common to all USAF developed ejection seats, it was chosen as the common point for the moment reference center. The Seat Reference Point is defined as the intersection of the compressed seat back tangent plane and compressed seat cushion tangent plane and the plane of symmetry.

The data obtained for the three ejection seat models using the center of gravity locations shown in Figure 11 as the moment reference center were transferred to the Seat Reference Point for comparison purposes. The transfer distances from the CG to the SRP for the three models are given in Table I. The data tabulated in the Appendix has the SRP as the moment reference center.

(2) Axis System - A body axis system, as shown in Figure 12, was chosen to be consistent with the airplane body axis system. It consists of a set of mutually perpendicular axes, X, Y, and Z, with their origin at the Seat Reference Point. The X and Z axes always lie in the plane of aerodynamic symmetry. The X axis is normal to the plane of the seating surface that supports the crew member's spine (compressed seat back tangent plane) and is positive in the direction that the crewmember faces. The Z axis coincides with the line of intersection between the plane of aerodynamic symmetry and the compressed seat back tangent plane and is positive in the head to feet direction. The Y

axis is perpendicular to the plane of aerodynamic symmetry and is positive from left to right. When the compressed seat back tangent plane is perpendicular to the wind stream vector both the angle of attack and yaw are zero. Rotation of the ejection seat about the Z axis to the right (facing upstream) creates a positive yaw angle (Ψ) and a subsequent rotation of the ejection seat clockwise about the Y axis creates a positive angle of attack (α). The direction of the moments were chosen to be consistent with the universally used right hand rule of moment-force relationship.

Selection of this axis system permitted the direct application of the half scale and 0.096 scale data with the exception of changing the sign of the axial and normal force coefficients ($C_X = -C_Z$ and $C_Z = -C_N$). However, in addition to these changes the full scale model data had to be modified by transferring the forces and moments from the balance axis system to this new axis system by standard transfer equations, and then reducing them to coefficient form.

This axis system is directly applicable to computer simulation and also corresponds to the established human tolerance "G" vector coordinate system with the exception of the $+G_Z$ vector which is in the opposite direction of the +Z axis.

(3) Projected Frontal Area - Since the force and moment coefficients are directly related to the projected frontal area, the values of the half scale and 0.096 scale models were somewhat larger than the full scale model which included the extremities in the projected frontal area. The reference projected frontal area for both these models were therefore upgraded to include the extremities. The procedure for obtaining these areas was similar to

the procedure for obtaining the full scale model reference area as described in Paragraph 1.a.(3) above. The half scale model projected frontal area increased from 1.73 ft^2 to 1.86 ft^2, and the 0.096 scale model projected frontal area increased from 6.70 in^2 to 8.7 in^2. The 0.096 scale model data obtained at Mach 0.6, for comparison purposes, and all the half scale model data were corrected incorporating these new areas.

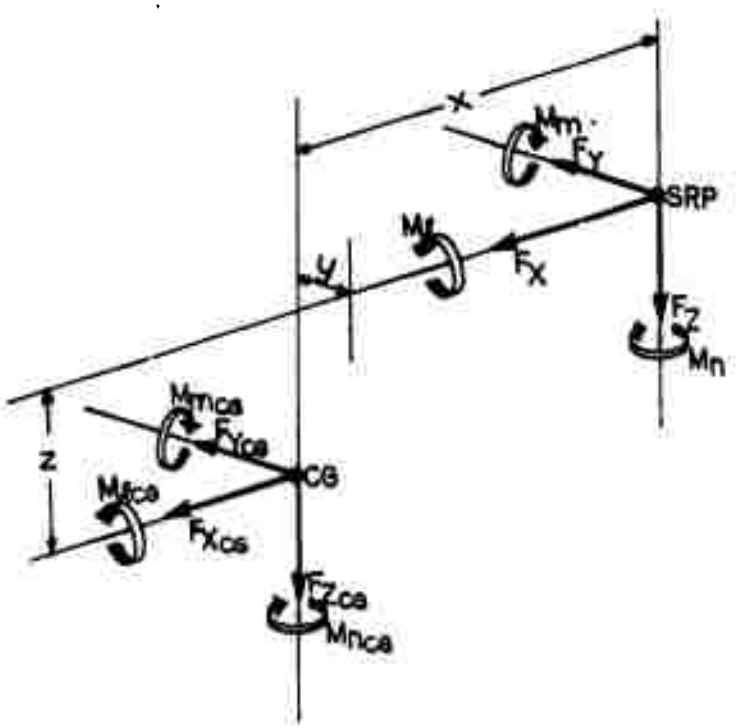
(4) Reference Length - The reference lengths of the half scale and 0.096 scale models were changed from seat height to hydraulic diameter to conform with the same method used in obtaining the full scale model reference length. The 0.096 scale model reference length was reduced from 4.404 inches to 3.33 inches and the half scale model reference length was reduced from 24 inches to 18.74 inches. The data for these two models were subsequently modified to include this change.

2. DATA APPLICATION

a. General Transfer Equations

The ejection seat aerodynamic coefficients presented in the Appendix were obtained by transferring the original date from the center of gravities of the F-101 and F-106 ejection seat models to the Seat Reference Point as the coefficient moment center using the standardized data reduction variables. For ejection seat performance prediction analysis, however, it is advantageous to have the data referenced about the seat-man center of gravity of the seat being analyzed. Therefore, the following procedure for transferring the aerodynamic coefficients from the SRP to the CG of the ejection seat being analyzed is provided for reference.

For convenience in developing these transfer equations, the assumption is made that the center of gravity of an occupied ejection seat is in the quadrant where the three transfer distances, x, y, and z, are positive.



The axial, normal, and side forces do not change with respect to the selection of the moment reference center when the two axis systems are in parallel planes. Therefore,

$$F_{X_{CG}} = F_X \quad (1)$$

$$F_{Y_{CG}} = F_Y \quad (2)$$

$$F_{Z_{CG}} = F_Z \quad (3)$$

However, the moments must be transferred through the vertical distance z, forward a distance x, and if the CG is not in the plane of aerodynamic symmetry a side distance y. Therefore,

$$M_{\ell_{CG}} = M_\ell + zF_Y - yF_Z \quad (4)$$

$$M_{m_{CG}} = M_m + xF_Z - zF_X \quad (5)$$

$$M_{n_{CG}} = M_n + yF_X - xF_Y \quad (6)$$

Replacing the forces and moments with their corresponding coefficients provide the following equations:

$$C_{X_{CG}} = C_X \quad (7)$$

$$C_{Y_{CG}} = C_Y \quad (8)$$

$$C_{Z_{CG}} = C_Z \quad (9)$$

$$C_{\ell_{CG}} = C_\ell + zC_Y/d - yC_Z/d \quad (10)$$

$$C_{m_{CG}} = C_m + xC_Z/d - zC_X/d \quad (11)$$

$$C_{n_{CG}} = C_n + yC_X/d - xC_Y/d \quad (12)$$

These equations represent the force coefficients in the standardized axis system and moment coefficients referenced to the seat center of gravity. Although not always true on actual ejection seats, for analytical expediency the center of gravity location is normally considered to be in the plane of aerodynamic symmetry. Therefore, the transfer distance along the "Y" axis would be

zero and the terms yC_Z/d and yC_X/d in Equations 10 and 12, respectively, would be eliminated. Since the center of gravity of standard occupied ejection seats is always above and forward of the seat reference point, the z transfer distance will have a negative value. The terms C_X, C_Y, C_Z, C_ℓ, C_m, and C_n are the coefficient values given in the Appendix, "d" is the reference length of the seat-man combination being analyzed, and x, y, and z are the transfer distances from the seat reference point to the center of gravity. As stated previously, the reference length is the hydraulic diameter and the reference area is the projected frontal area of the seat-man combination.

b. Ejection Seat Physical Characteristics

The physical characteristics of several full scale ejection seats were determined in the Air Force Flight Dynamics Laboratory's Center of Gravity - Inertia Swing. The pertinent characteristics of some of the seats analyzed are listed in Table II. The areas were obtained by placing the seats on their backs and tracing their outline on paper. Dummies were then placed in the seats and the combined areas were traced on paper. The areas were then determined by a planimeter. The weight for each seat assembly consists of either a 5th or 95th percentile occupant weighing 140 or 211 pounds, respectively, when dressed in a standard summer flight suit, helmet, and shoes, a standard back pack parachute weighing 25.5 pounds (except the F-4 ejection seat which had an integrated parachute), a standard survival kit weighing between 40 and 47 pounds depending on the type of seat, a rocket catapult ballasted to represent half burn, and the seat bucket assembly. The methods of obtaining the data listed in Table II and ejection seat moments of inertia are documented in Reference 8.

Using the values in Table II for transfer distances from the SRP to the CG and hydraulic diameters it is possible to determine representive aerodynamic force and moment coefficients for any of these seats by using the above equations and the data tabulated in the Appendix.

SECTION IV

AERODYNAMIC CHARACTERISTICS

1. VARIATION OF COEFFICIENTS

The variation of the half scale model axial force, normal force, and pitching moment coefficients with angle of attack for both rocket-on and rocket-off conditions are presented in Figure 13. The model configuration is with the hands on the arm rest controls. The rocket-on data shown are for a sea level rocket plume shape. The moment reference center is about the Seat Reference Point and the angle of yaw is zero. The magnitude of the axial force coefficient is largest at the angle of attack which nearly aligns the force axis with the airstream direction. The maximum axial force occurs between approximately 0 to -30 degrees angle of attack which can be attributed to a maximum model surface area being exposed to the wind stream in this range. Due to the construction of an ejection seat, the above does not hold true for the normal force. The normal force coefficient approaches maximum values at approximately -50 and +100 degrees. Here again, the surface area exposed to the wind stream is at the maximum. As the normal force vector aligns with the wind stream, i.e., -90 and +180 degrees, the exposed surface area decreases. The magnitude of both force coefficients increase with increasing Mach Number.

When yaw angle is zero degrees the side force, rolling moment, and yawing moment coefficients remain fairly constant throughout the angle of attack range and for all practical purposes can be assumed to be zero. However, as would be expected, as the yaw angle increases the magnitude of these coefficients also increases.

2. STABILITY CHARACTERISTICS

a. Static Longitudinal Stability

Conventional static longitudinal stability characteristics of an ejection seat cannot be determined from a pitching moment coefficient curve when the Seat Reference Point is selected for the moment reference center. Therefore, the pitching moment coefficient values for Mach 0.6 about the SRP were transferred to the CG for both the full scale F-101 and F-106 ejection seats containing both 5th and 95th percentile occupants by using the values given in Table II, and the transfer equations developed in Section III. The results of the data transfer are presented in Figure 14. It is evident from this graph that the ejection seat trim angle is dependent upon the size of the crew member, or seat-man CG location at the time of ejection. The F-106 seat with a 5th percentile occupant trims at approximately -40 degrees and with a 95th percentile occupant trims at approximately -45 degrees. Although the variation in trim angle is not as evident for the F-101 seat, with different size occupants it still exists. The slope $(\partial C_m/\partial \alpha)$ of the curve presented in Figure 14 indicates that the above configured ejection seats exhibit static longitudinal stability in the angle of attack range from 0 to -60 degrees, neutral static longitudinal stability from approximately 0 to +20 degrees, and statically unstable characteristics above +20 degrees.

b. Static Directional Stability

The static directional stability characteristics can be obtained in a similar manner from the slope $(\partial C_n/\partial \psi)$ of the yawing moment coefficient curve. An ejection seat exhibits unstable directional characteristics when either the SRP or CG is chosen as the moment reference center. As shown in Figure 15, when the SRP is the moment reference center

the slope of the yawing moment curve indicates that the half scale model was directionally unstable. When these data were transferred to the CG for both the full scale F-101 and F-106 ejection seats the results shown in Figure 16 indicates that although the slope of the yawing moment curve decreases, both seats still exhibit unstable directional characteristics.

c. Static Lateral Stability

The static lateral stability characteristics can be interpreted from the slope $(\partial C_\ell/\partial \psi)$ of the rolling moment coefficient as a function of yaw angle curve. For these data shown in Figure 15, where the Seat Reference Point is the moment reference center, the slope would indicate that an ejection seat is laterally stable throughout the angle of attack range shown. However, when the center of gravity is chosen as the moment reference center the slope of the rolling moment curve, shown in Figure 16 for both the F-101 and F-106 ejection seats, indicates that an ejection seat displays unstable lateral characteristics throughout the yaw range shown with increasing instability at the negative angles of attack.

3. EFFECTS OF INDEPENDENT VARIABLES

a. Mach Number

The effects of Mach number on the force and moment coefficients are presented in Figures 17 and 18. These values are for the moment reference center about the Seat Reference Point. The greatest variation of axial force coefficient with Mach number is in the angle of attack range from -40 to +20 degrees, near the force axis alignment with the airstream. There is very little Mach number variation where the axial force component is perpendicular to the airstream. The Mach number effect on the axial force coefficient as a function of yaw angle is the

greatest at yaw angles less than 15 degrees.

The normal force coefficient as a function of angle of attack varies with Mach number in the same manner as the axial force. The greatest variation is in the region where the axis nearly aligns with the airstream. However, the values of normal force coefficient as a function of yaw angle increase as Mach number and yaw angle increase.

The variation of pitching moment coefficient with Mach number is not quite as evident as the force coefficients. The largest variation, however, is in the region of greatest importance with regard to ejection seats. It is in the region from 0 to approximately +45 degrees where ejection usually occurs. At constant angle of attack the yawing moment coefficients as a function of yaw angle does not vary with Mach number. However, the rolling moment coefficient increases as Mach number and yaw angle increase.

b. Altitude

Test were conducted at altitudes of sea level, 10,000, 20,000, 30,000, and 40,000 feet with and without rocket catapult simulation. As shown in Figure 19, the variation of force and moment coefficients with altitude at the rocket off condition is negligible and can be considered to have no effect. The data for the other three altitudes are not included since they fell between these two extremes. In the rocket on situation, however, as shown in Figure 20, there is a large variation. This can be attributed to the expansion of the plume shape with altitude, which in turn causes an increasing disruption of the airflow around the seat.

c. Rocket Exhaust

The effect of the rocket plume on an ejection seat's aerodynamic characteristics can be seen in Figures 13 and 20. The rocket plume causes erratic and unpredictable behavior in the region from approximately +90

to +240 degrees where the exhaust is pointing upstream. In this range, the plume shields the ejection seat from the free-stream airflow resulting in large variations of forces on the seat. This shielding effect increases with altitude due to the increase in plume size and decreases with increasing Mach number.

d. Hand Position

The effect of changing the ejection initiation hand positions is shown in Figure 21. The greatest variation in force coefficients occurs in the vicinity of zero angle of attack. However, there is a difference in force coefficient values through an angle of attack range from approximately -60 to +30 degrees. The magnitude of the force coefficients for the "hands on the arm rests" position is the greatest throughout this range. The "hand on the "D" rings" values always falls between the two. This trend led to the postulation that the change in projected frontal area when changing hand positions caused the variation in the coefficient values. Therefore, the projected frontal area of the half scale seat using all three hand positions were determined. The projected frontal areas for the three were 1.86, 1.75, and 1.72 for hands of the arm rest, hands on the "D" ring, and hands on the face curtain, respectively. The force and moment coefficients for the hands on the "D" ring and hands on the face curtain hand positions, were recomputed using their respective projected frontal areas. As shown in Figure 22, the recomputed values has very little effect on the variation of the coefficients. It therefore can be assumed that the variations shown can be attributed to the change in airflow about the seat when the hand positions are changed and not to the difference in projected frontal areas.

The variation of force coefficients due to hand positions decreases with angle of attack and Mach number. The different

hand positions have no appreciable effect on the seat pitching moment coefficient. As noted previously, the arms are shielded from the airstream in the angle of attack range from +120 to +240 degrees, and for this reason no data were obtained for hand positions on the "D" ring and face curtain between these angles.

e. Reynolds Number

During the full scale ejection seat model wind tunnel test program the effect of Reynolds number on the model's aerodynamic characteristics was investigated at free-stream Mach numbers of 0.4, 0.6, and 0.8. The Reynolds number was varied from 0.94×10^6 to 4.32×10^6 per foot and data collected throughout the angle of attack and yaw range. The data, presented in Reference 4, show that Reynolds number effects were negligible and within the precision of the data over the range of Reynolds numbers investigated at each Mach number.

4. APPLICABILITY OF DATA

As discussed in Section III, the wind tunnel data reduction variables of a full scale F-101 ejection seat model, a half scale F-106 ejection seat model, and a 0.096 scale B-47 downward ejection seat model were standardized to enable comparison of the aerodynamic coefficients. For data comparison purposes, these three ejection seat models provide an excellent baseline guide. The seats are of different configuration and shape; the model sizes represent full scale, medium scale, and small scale models; and the occupant sizes are of 95th, 50th, and 5th percentile of U.S. Air Force Flying Personnel, respectively. Therefore, it was theorized that if the data for these extremes in seat shape, model size, and occupant size were

comparable the data could be used for performance analysis during ejection seat design activities for any ejection seat configuration. Data for the maximum angle of attack range from -51 to +79 degrees obtained during the full scale test program determined the angle of attack range for the comparison and the only Mach number common to all three programs was Mach 0.6. As shown in Figure 23, both the axial and normal force coefficients and the pitching moment coefficient for all three models tested agree very well throughout the angle of attack range shown. It is probable that the disagreement shown for the force coefficient at zero angle of attack is predominantly the result of model to sting interference effects of the half scale model. Figure 24 shows the comparison of the axial and normal force coefficients and pitching moment coefficients for the three models as a function of Mach number. A constant angle of attack of approximately 20 degrees was selected for this comparison to negate the sting interference effects of the half scale model. Again excellent agreement is shown in the data presented. Very good continuity in aerodynamic coefficients can be seen throughout the Mach number range tested as shown by the dotted lines. It is therefore concluded from the excellent agreement of the data from all three models that the data presented in the Appendix can be used for performance analysis of any existing or planned ejection seat escape system without any significant error in the results. However, when the seat being analyzed has a seat bucket that travels independently of the headrest it must be cautioned that selection of the center of gravity location and the projected frontal area to be used in the transfer equations must be made after

seat adjustment position has been determined. For example, as shown in Table II, the projected frontal area of an unoccupied ejection seat used in the USAF F-4 aircraft can vary from 5.47 ft^2 to 6.13 ft^2 depending on the seat adjustment.

SECTION V

CONCLUSIONS

1. The data presented in the Appendix can be used for performance analysis of any existing or planned ejection seat without any significant error in the results.

2. Ejection seat trim angle is dependent upon the seat-man center of gravity location at the time of ejection.

3. An ejection seat exhibits unstable static longitudinal characteristics at positive angles of attack, and unstable directional and lateral stability characteristics at positive angles of attack and low angles of yaw.

4. Increase in the free-stream Mach number increases the magnitude of the force and moment coefficients.

5. Variations of force and moment coefficients with increasing altitude at rocket off conditions are negligible. However, at rocket on conditions the variation in coefficients with increasing altitude is extensive due to the expansion of the rocket plume at increasing altitude.

6. The rocket exhaust causes erratic and unpredictable behavior of the ejection seats aerodynamic coefficients in the angle of attack range from +90 to +240 degrees. The rocket exhaust causes very little change in the coefficients at other angles of attack at constant altitude.

7. Reynolds number effects on the aerodynamic characteristics of an ejection seat are negligible.

8. Change in ejection initiation hand position can effect the aerodynamic characteristics of a typical ejection seat.

9. The size of an ejection seat wind tunnel model does not have an appreciable effect on the aerodynamic coefficients.

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3. Henson, J. R., and Robertson, J. E., "Methods of Approximating Invisicid Jet Boundaries for Highly Underexpanded Supersonic Nozzles", AEDC-TDR-62-7, May 1962.

4. Pindzola, M., "Boundary Simulation Parameters for Underexpanding Jets in a Quiescent Atmosphere", AEDC-TR-65-6, January 1965.

5. "Calculations for Simulating an Ejection Seat Catapult Rocket Plume by a Half-Scale Cold Air Jet", Weber Aircraft Engineering Report, DR 5961, October 1967.

6. Reichenau, David E. A., "Aerodynamic Characteristics of an Ejection Seat Escape System with Cold Flow Rocket Plume Simulation at Mach Numbers from 0.6 through 1.5", AEDC-TR-69-218 (AD 860482), October 1969.

7. Galigher, Lawrence L., "Aerodynamic Characteristics of a Full-Scale F-101 Ejection Seat with an Anthropomorphic Dummy at Free-Stream Mach Numbers from 0.2 to 0.8", AEDC-TR-72-38, March 1972.

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TABLE I

SUMMARY OF STANDARDIZED DATA VARIABLES

VARIABLES		MODEL SIZE		
		0.096 SCALE B-47	HALF SCALE F-106	FULL SCALE F-101
CREW MEMBER SIZE (PERCENTILE)		5%	50%	95%
REFERENCE LENGTH				
ORIGINAL VALUE		4.404 in.	24.00 in.	38.89 in.
STANDARDIZED VALUE		3.33 in.	18.47 in.	38.89 in.
REFERENCE AREA				
ORIGINAL VALUE		6.70 in^2	1.73 ft^2	8.25 ft^2
STANDARDIZED VALUE		8.70 in^2	1.86 ft^2	8.25 ft^2
DISTANCE FROM MODEL CG DOWN AND AFT TO THE MODEL SRP	x	-0.69 in.	-0.25 in.	-4.06 in.
	y	0	0	0
	z	.75 in.	4.28 in.	10.07 in.

TABLE II

EJECTION SEAT PHYSICAL CHARACTERISTICS

TYPE AIRCRAFT SEAT	SEAT PROJECTED[1] FRONTAL AREA (FT^2)	SIZE OF SEAT OCCUPANT (PERCENTILE)	SEAT-MAN[2] PROJECTED FRONTAL AREA (FT^2)	EJECTED SEAT WEIGHT (lbs)	CENTER OF GRAVITY LOCATION FROM SEAT REFERENCE POINT			HYDRAULIC DIAMETER (in)
					x(in)	y(in)	z(in)	
F-100	6.68	5	6.91	289.34	4.46	-0.06	-9.87	35.59
F-100	6.68	95	6.93	360.78	5.38	+0.03	-11.99	35.59
F-101	6.81	5	7.60	315.28	3.95	-0.06	-10.26	37.33
F-101	7.05	95	8.25	382.74	4.15	-0.02	-11.00	38.89
F-102	5.89	5	6.46	270.65	3.68	-0.16	-8.40	34.42
F-102	5.89	95	7.16	341.26	4.52	+0.19	-10.06	36.23
F-105	7.21	5	7.54	325.80	3.43	+0.17	-9.72	37.18
F-105	7.21	95	7.71	396.25	4.21	+0.36	-11.03	37.60
F-106	6.11	5	6.61	285.45	2.20	-0.14	-8.91	34.81
F-106	6.11	95	7.08	354.38	2.82	+0.24	-10.25	36.03
F-4	5.47	5	5.95	379.70	7.45	+0.31	-9.83	33.03
F-4	6.13	95	7.08	450.70	8.15	+0.58	-8.69	36.03
T-38	7.24	5	7.53	307.78	3.39	+0.15	-10.16	37.16
T-38	7.24	95	7.91	378.85	3.90	+0.02	-10.79	38.08
ACES-1	5.93	5	7.22	348.05	5.63	+0.19	-5.28	36.38
ACES-1	5.93	95	7.34	418.95	6.60	+0.30	-6.07	36.68
ESCAPAC-1D	5.46	5	6.13	325.80	5.20	+0.00	-9.20	33.52
ESCAPAC-1D	5.46	95	6.39	397.00	6.00	+0.00	-10.70	34.23
ACES-II	5.76	5	6.48	298.80	5.04	-0.11	-8.14	34.46
ACES-II	5.76	95	6.94	369.87	6.13	+0.12	-9.51	35.68

[1] Where projected frontal areas differ for the same seat the seat bucket travels independently of either the head rest or catapult support bracket.

[2] Seat is adjusted full up for 5th% occupant and full down for 95th% occupant.

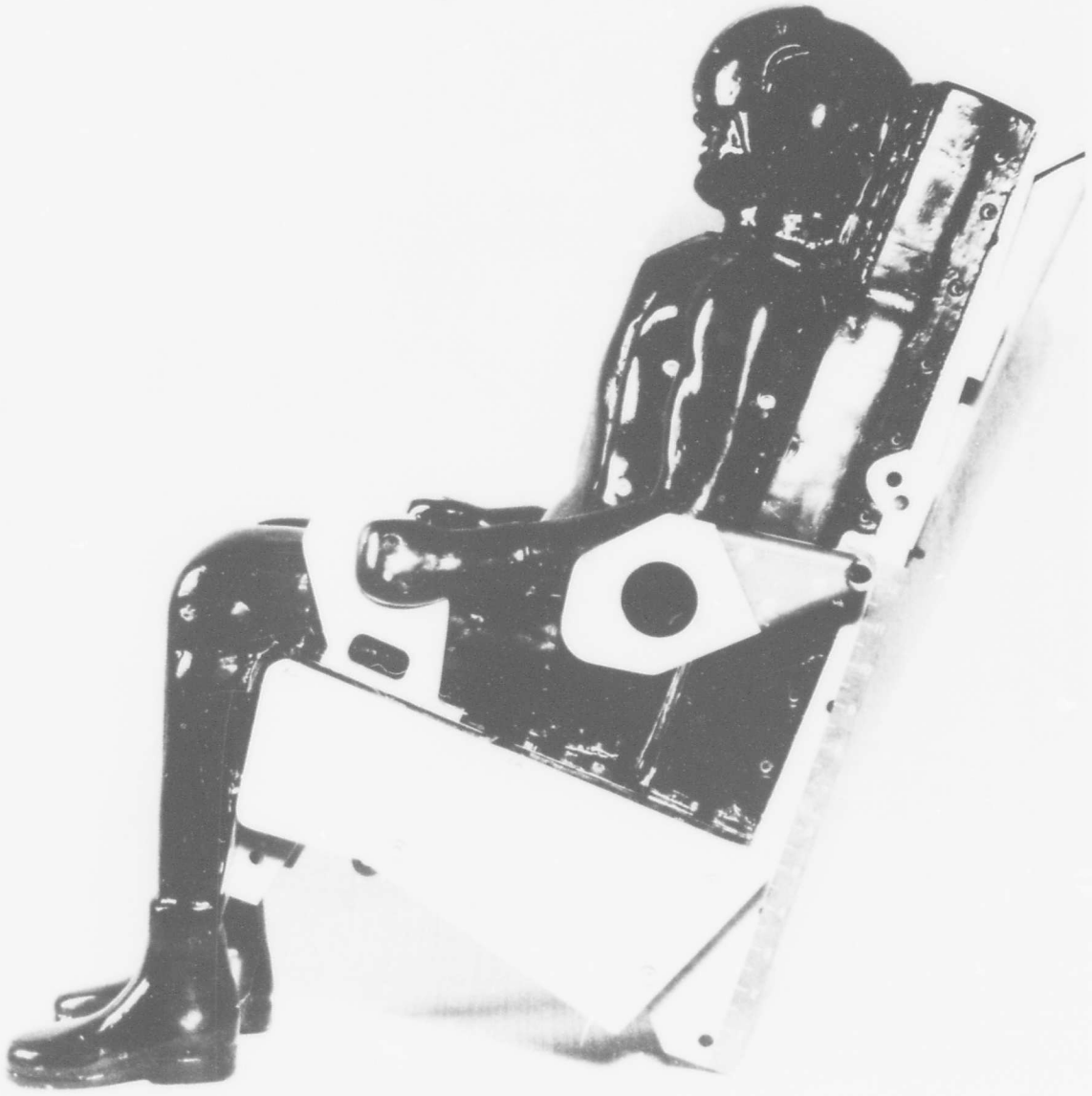


Figure 1 Half Scale F-106 Ejection Seat Wind Tunnel Model

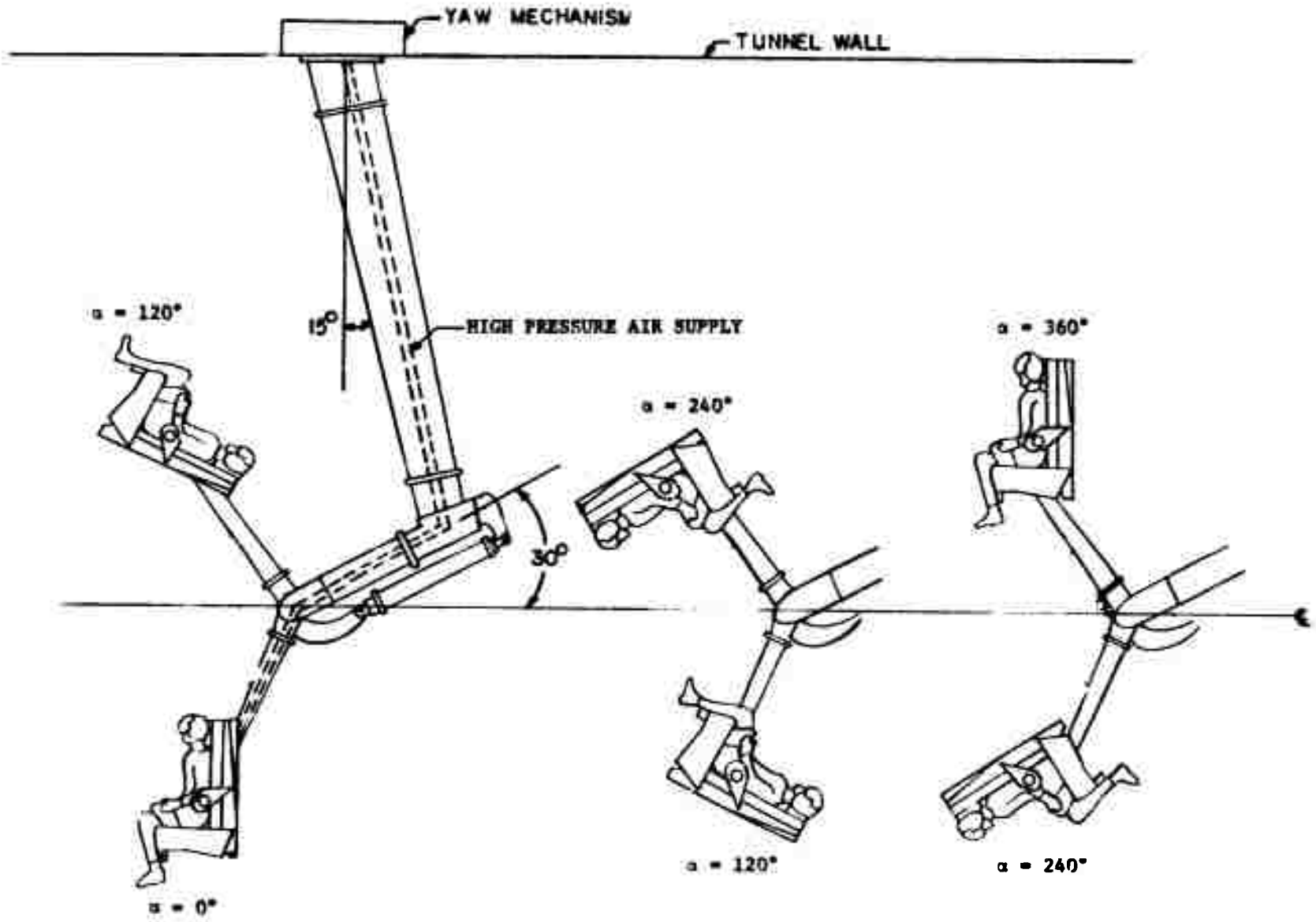


Figure 2 Half Scale Model Support System Showing Model-Sting Pitch Range

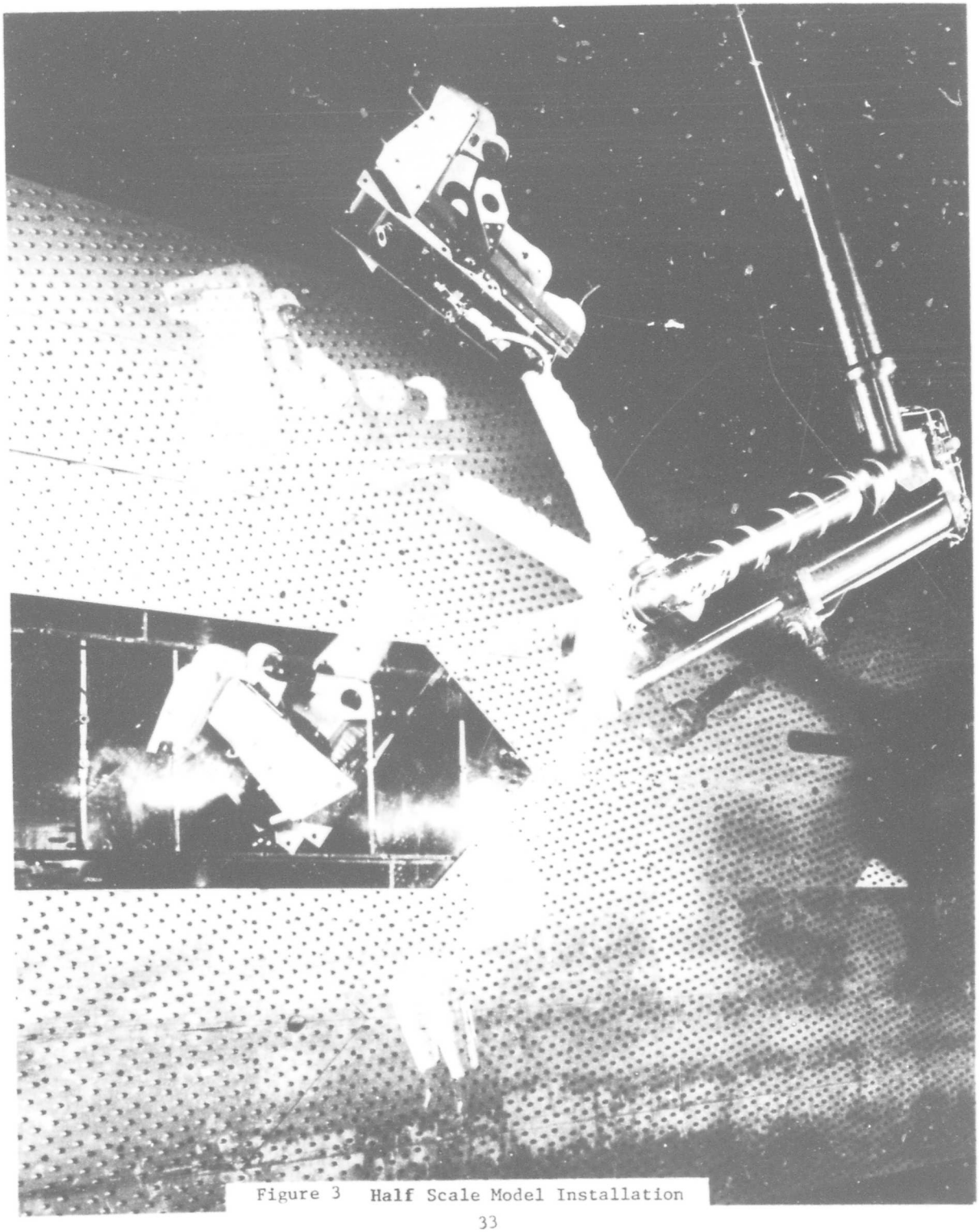


Figure 3 Half Scale Model Installation

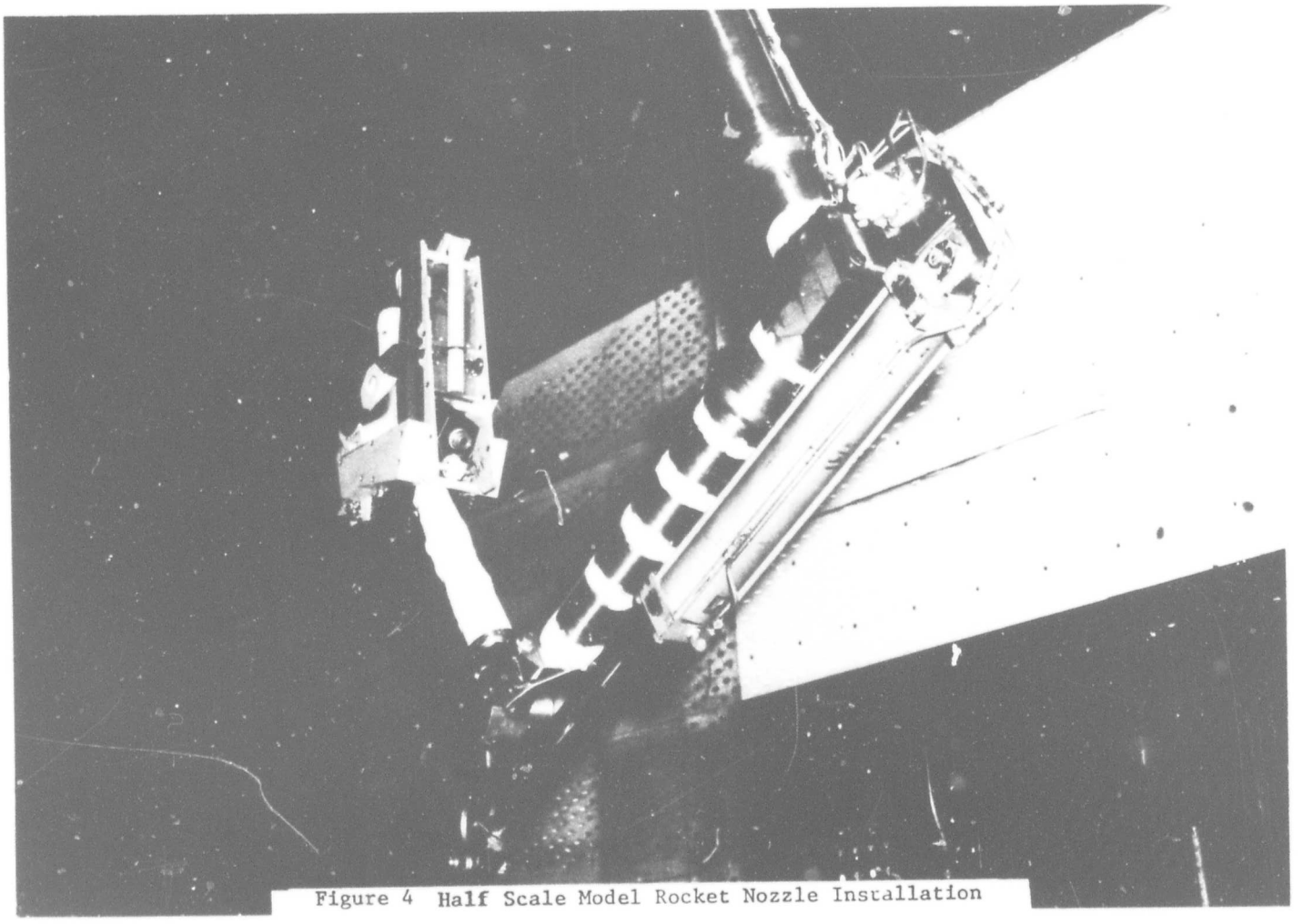
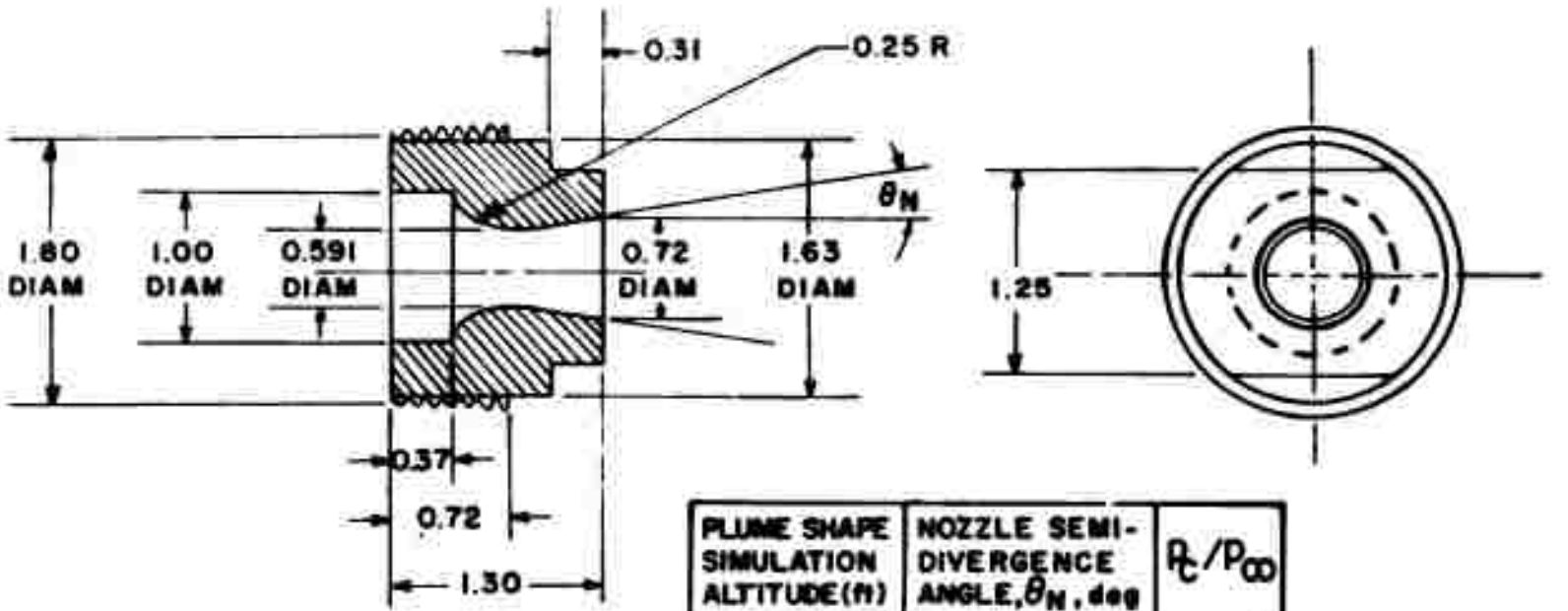


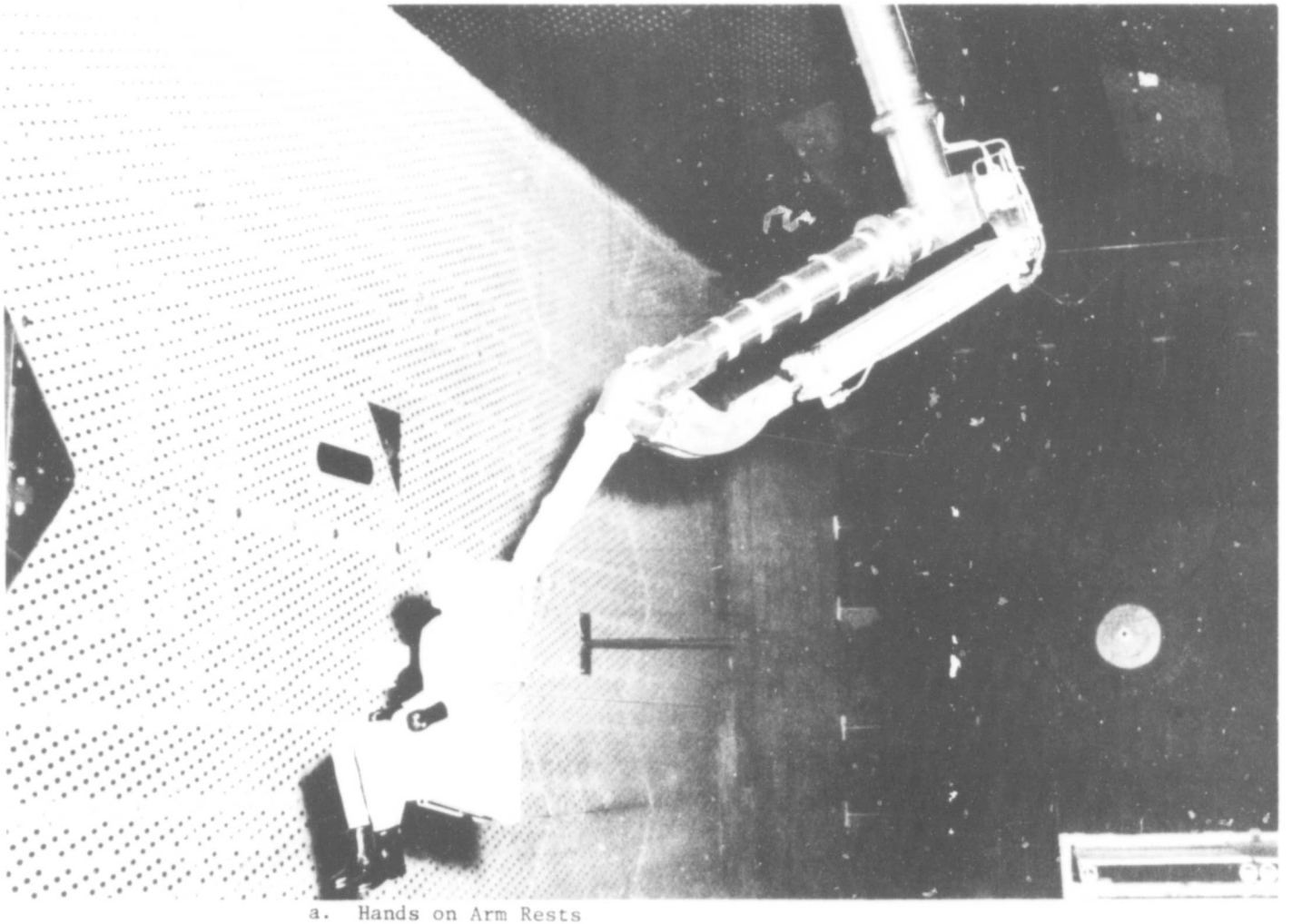
Figure 4 Half Scale Model Rocket Nozzle Installation



PLUME SHAPE SIMULATION ALTITUDE(ft)	NOZZLE SEMI-DIVERGENCE ANGLE, θ_N, deg	P_c/P_∞
SEA LEVEL	8.25	208
10,000	8.65	302
20,000	9.45	457
30,000	10.00	717
40,000	10.75	1162

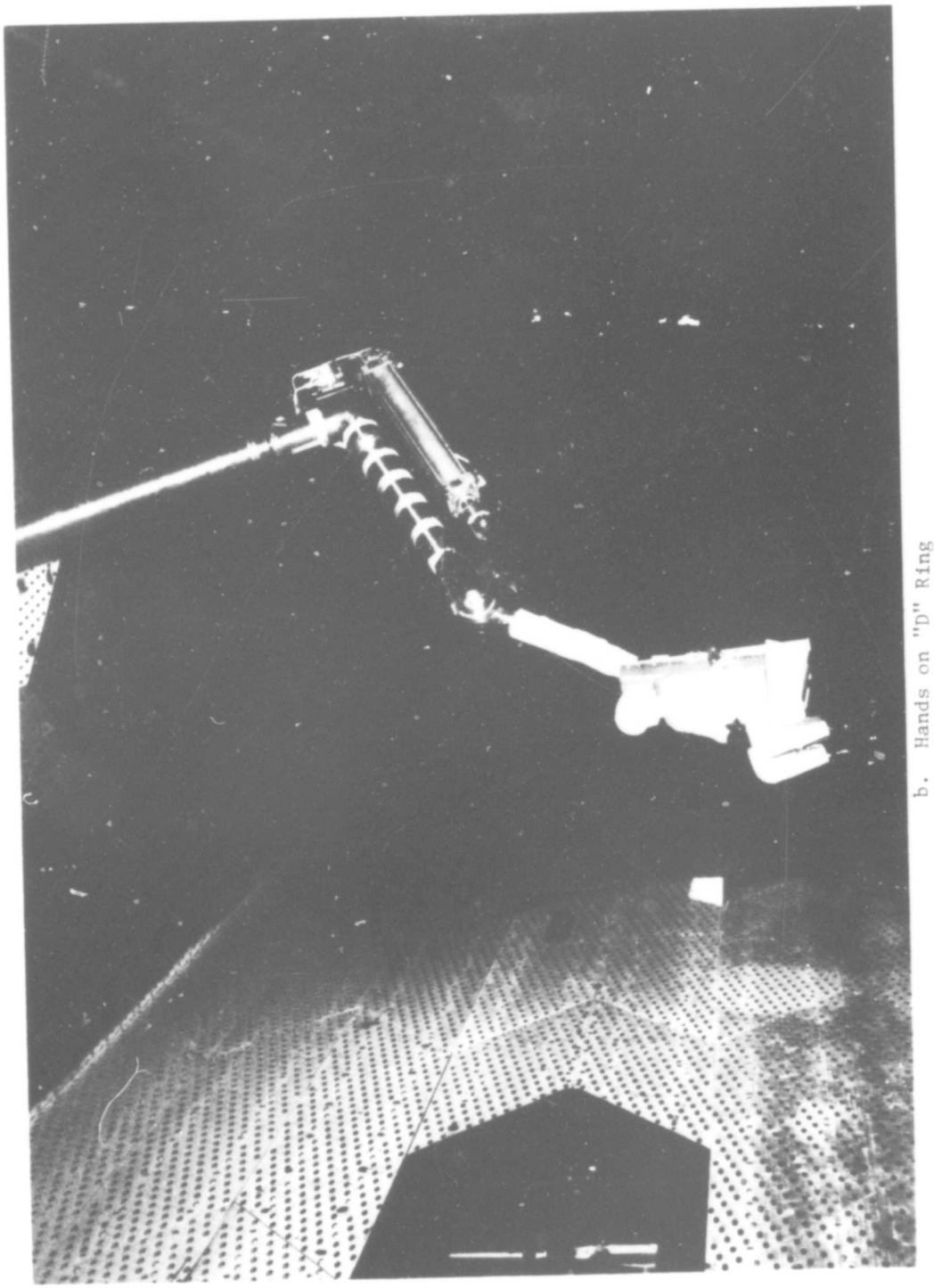
DIMENSIONS IN INCHES

Figure 5 **Rocket Nozzle Details and Simulation Parameters**



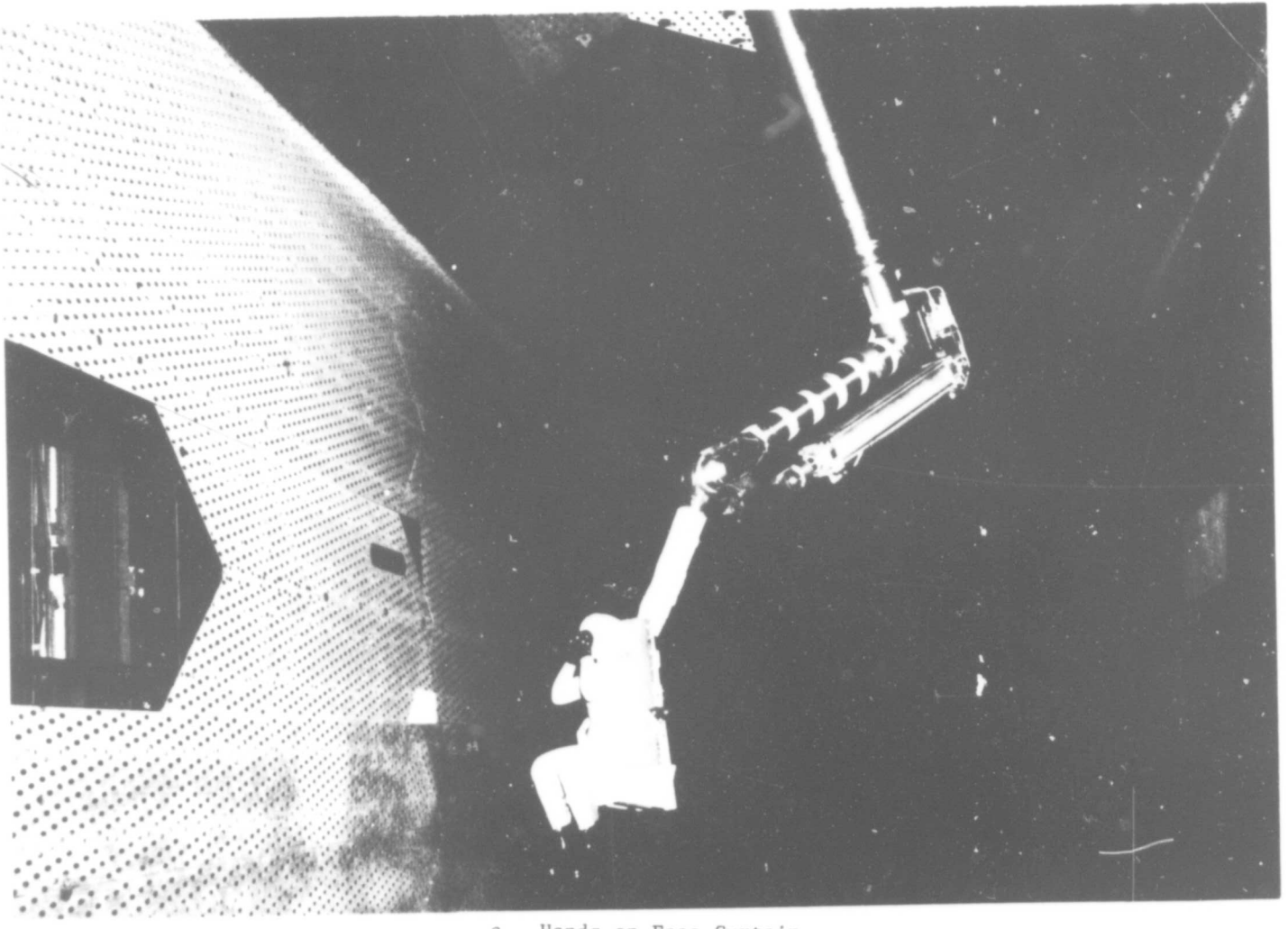
a. Hands on Arm Rests

Figure 6 Ejection Initiation Hand Positions



b. Hands on "D" Ring

Figure 6 Continued



c. Hands on Face Curtain

Figure 6 Continued

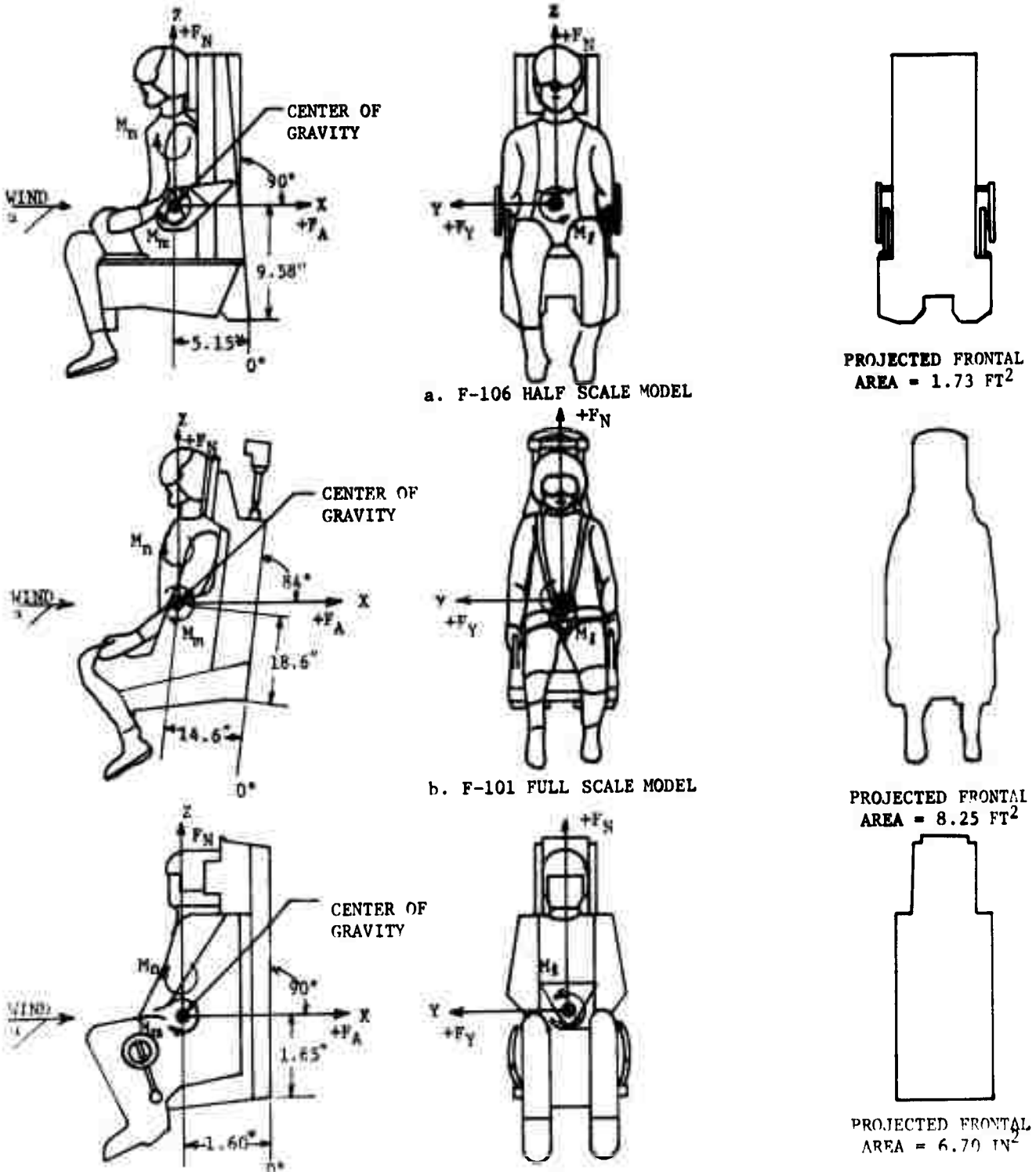


Figure 7 Original Model Body Axis Reference System and Projected Frontal Areas

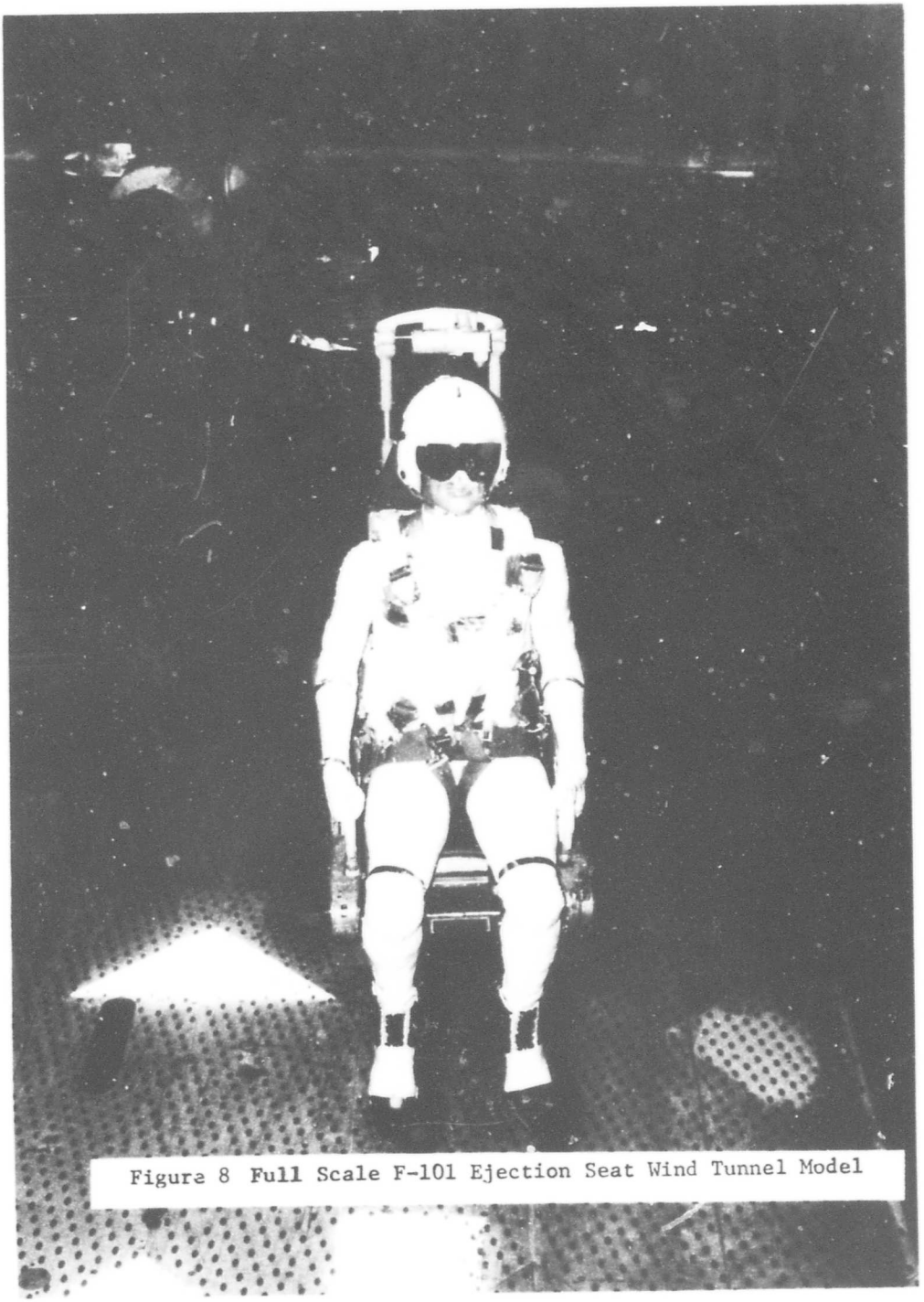


Figure 8 Full Scale F-101 Ejection Seat Wind Tunnel Model

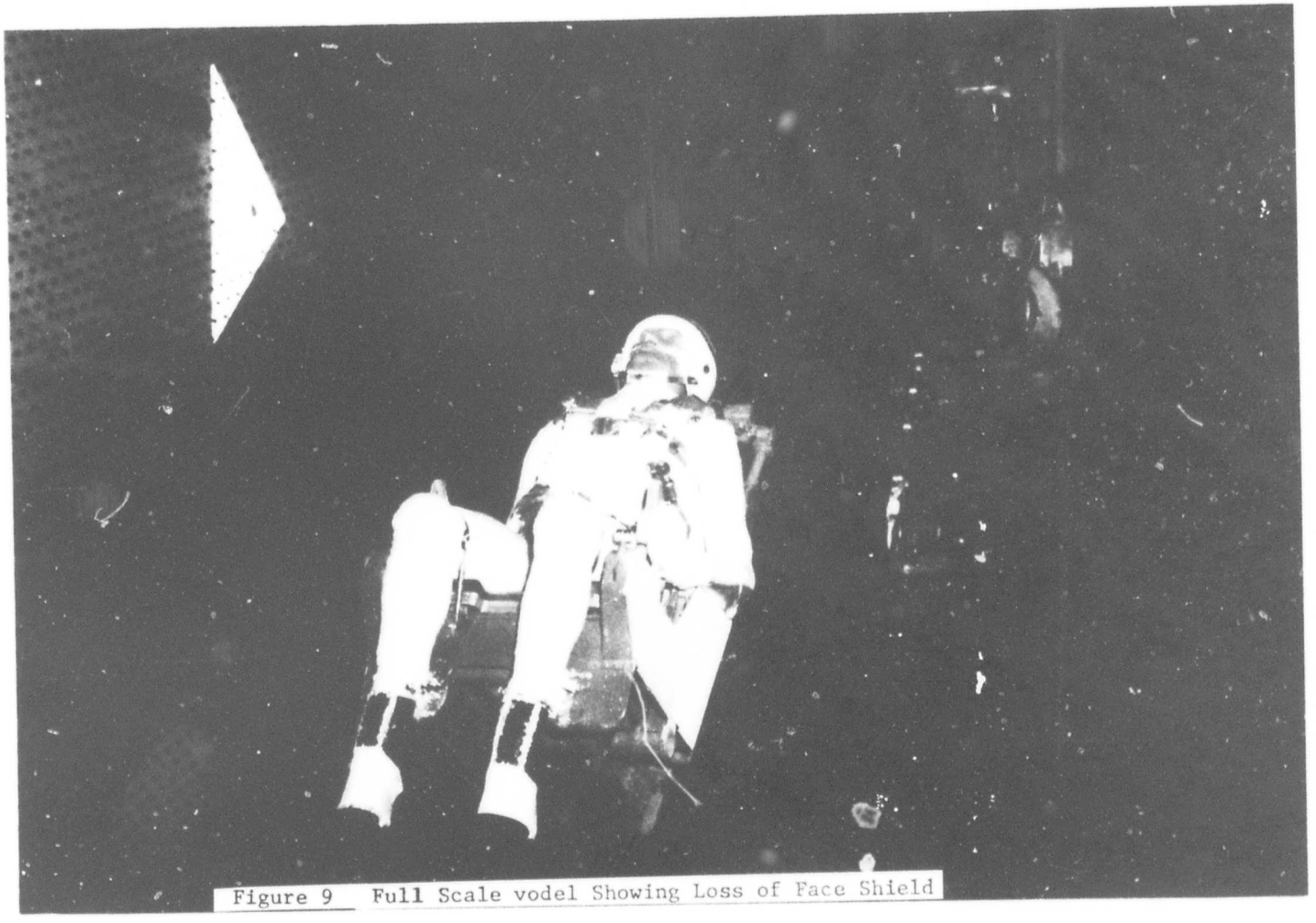


Figure 9 Full Scale vodel Showing Loss of Face Shield

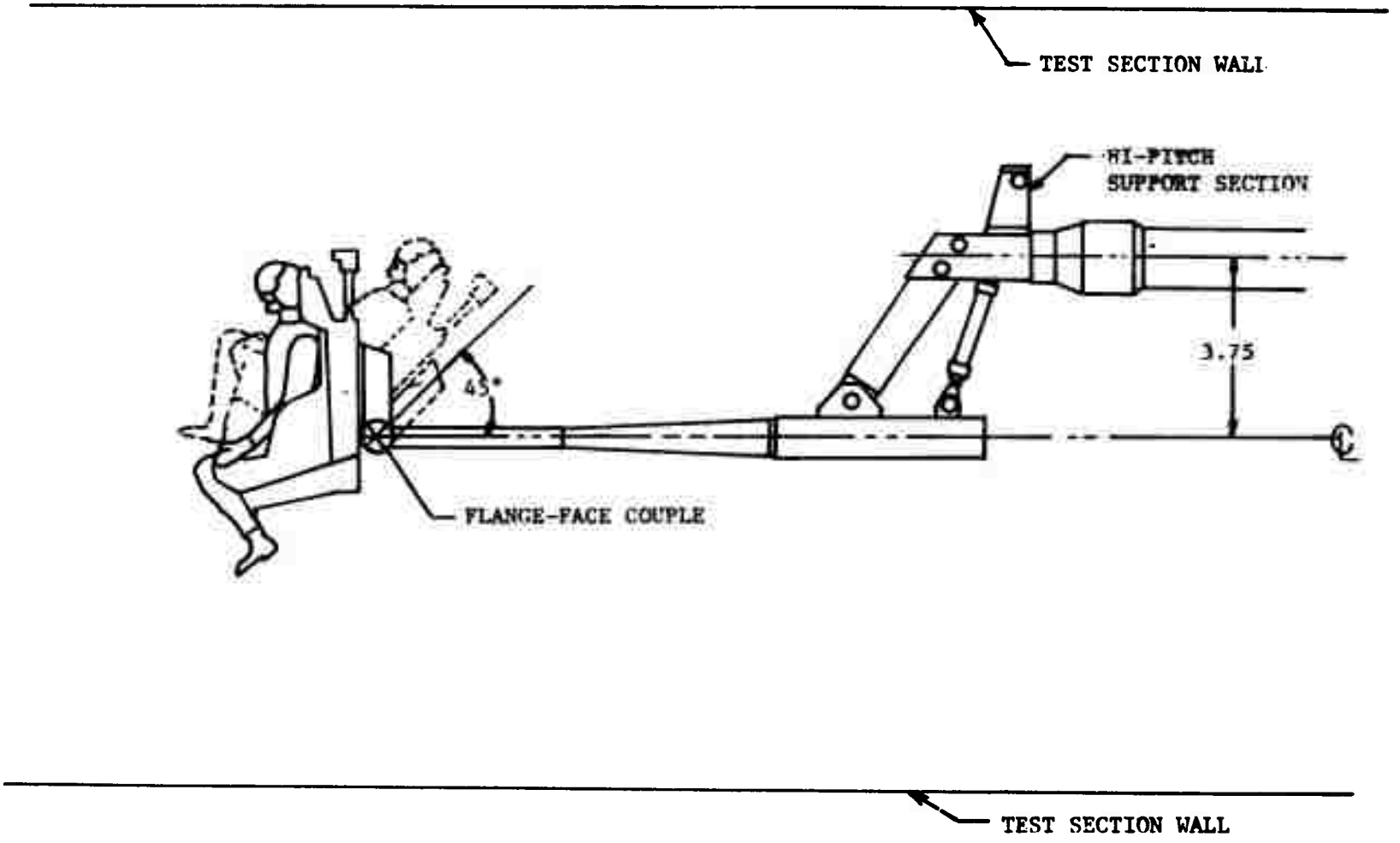


Figure 10. Full Scale Model Support System

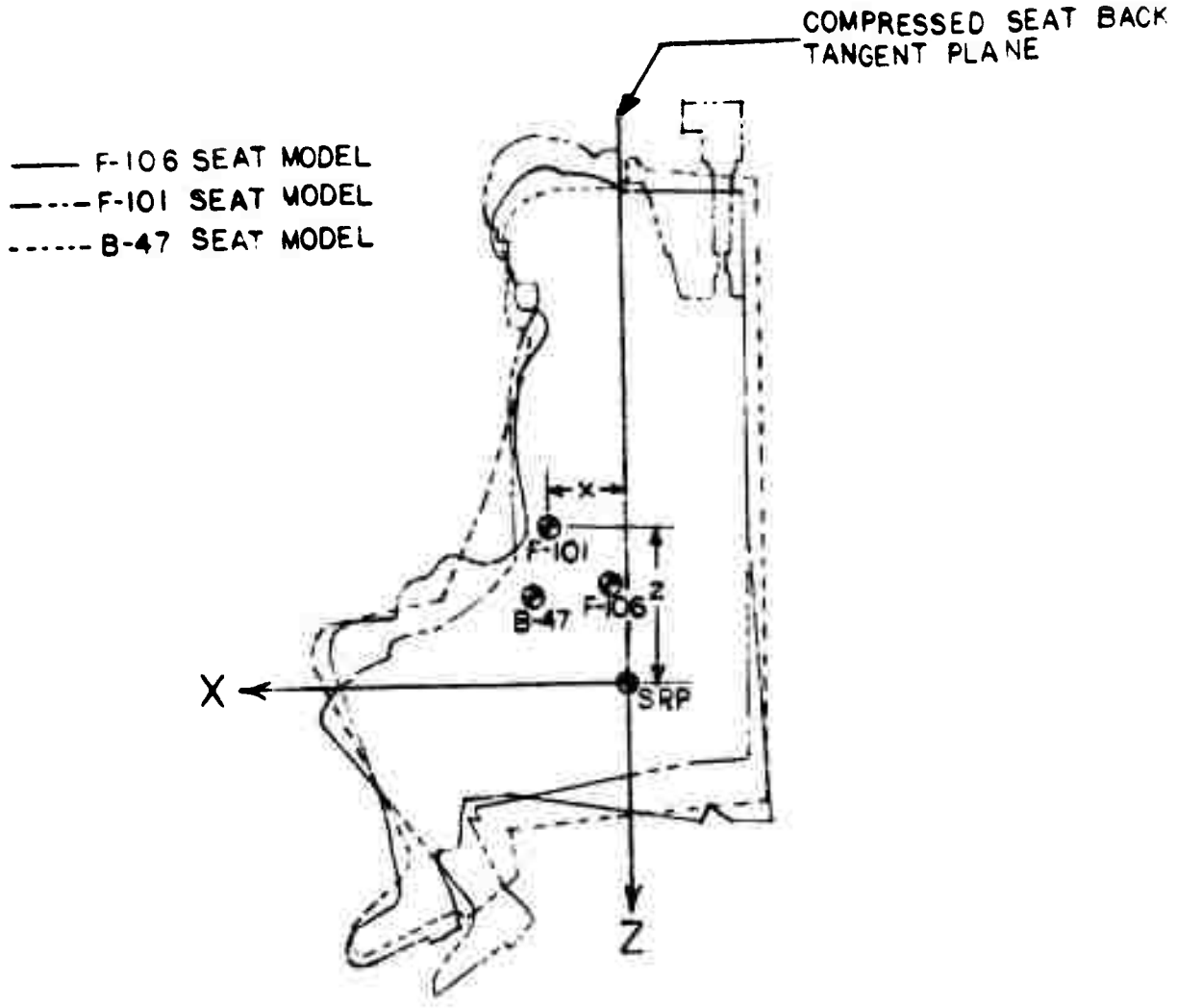


Figure 11. Model Center of Gravity Locations with Respect to Superimposed SRP and Common Seat Back Plane

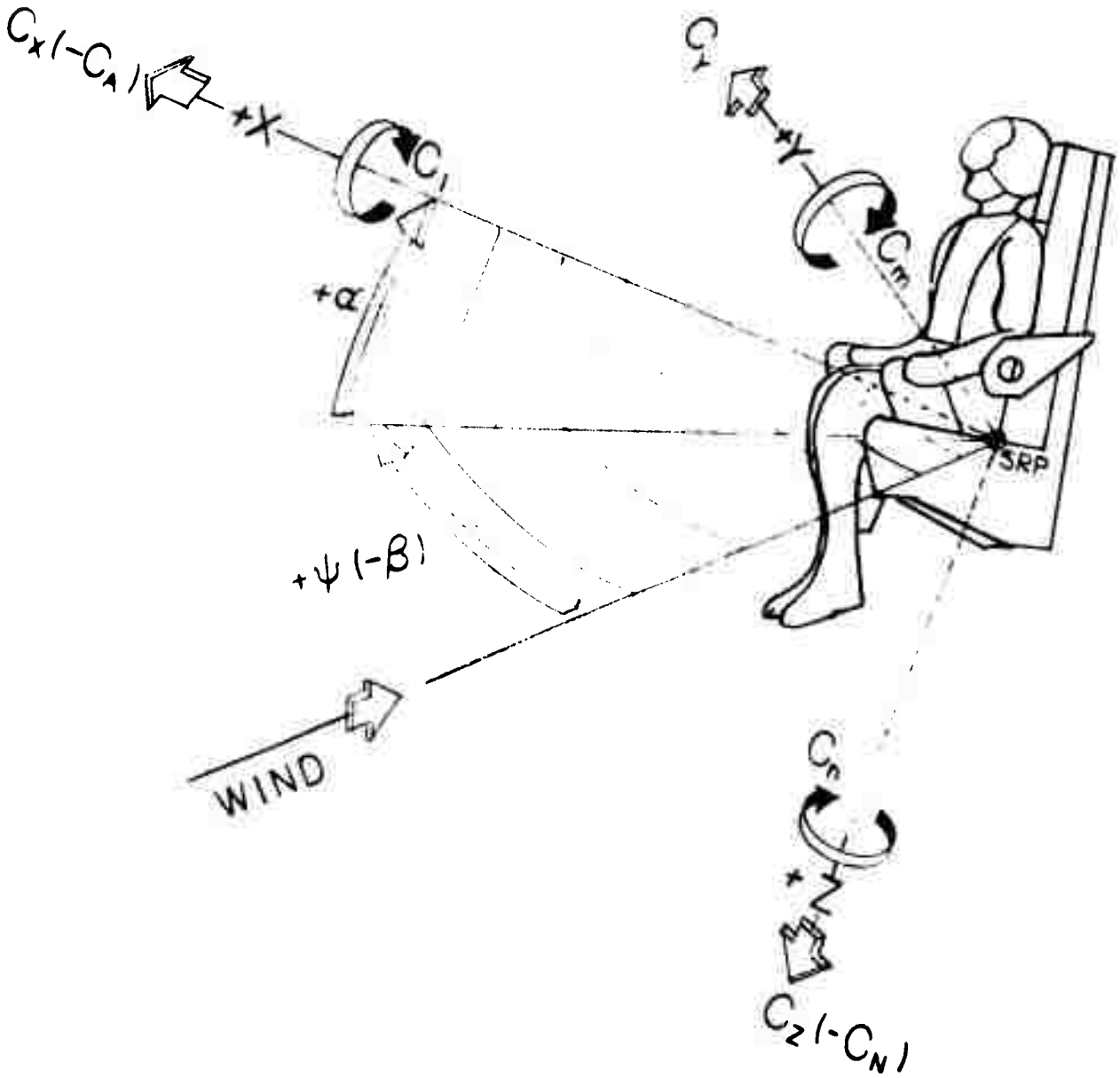
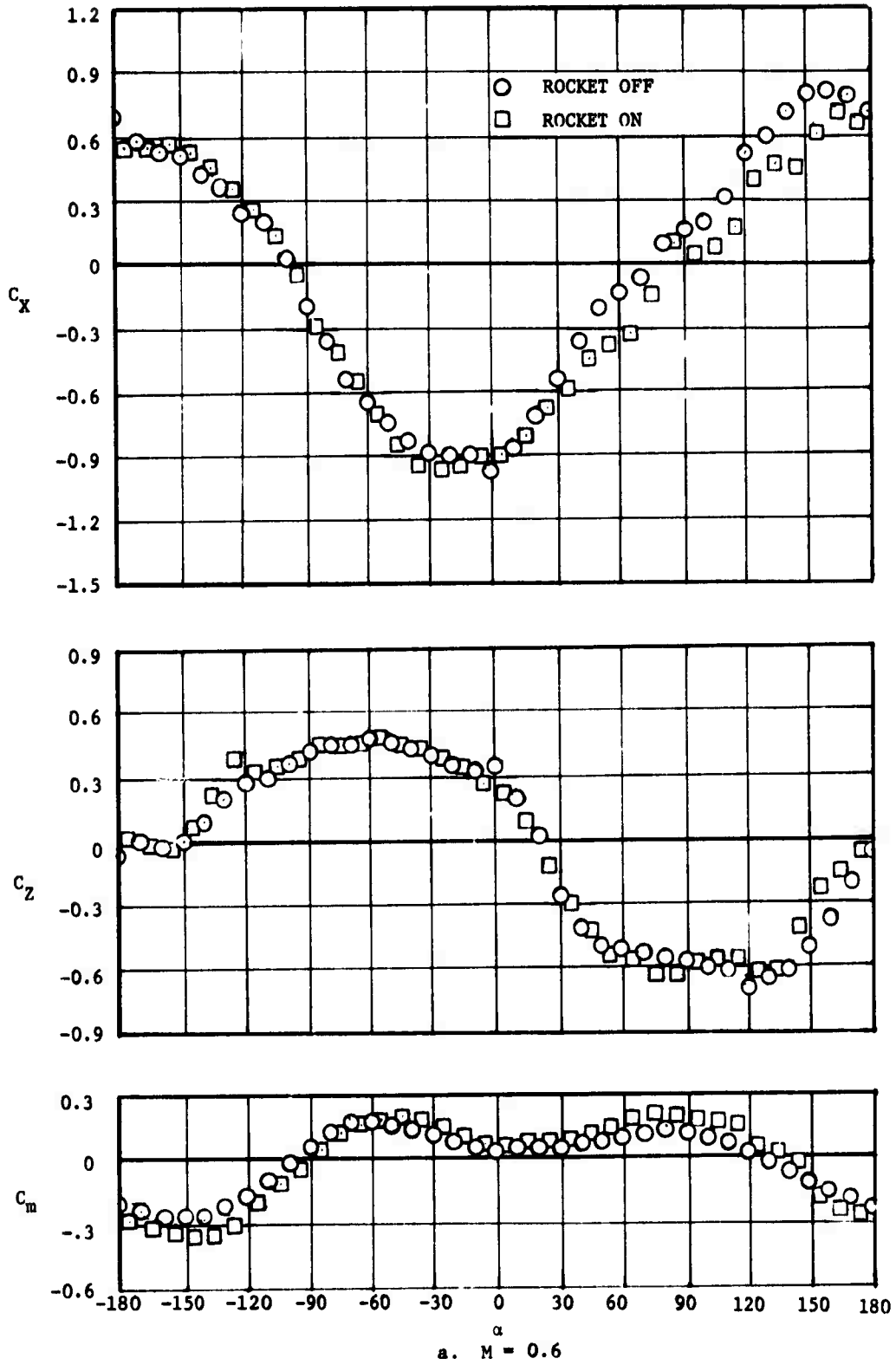
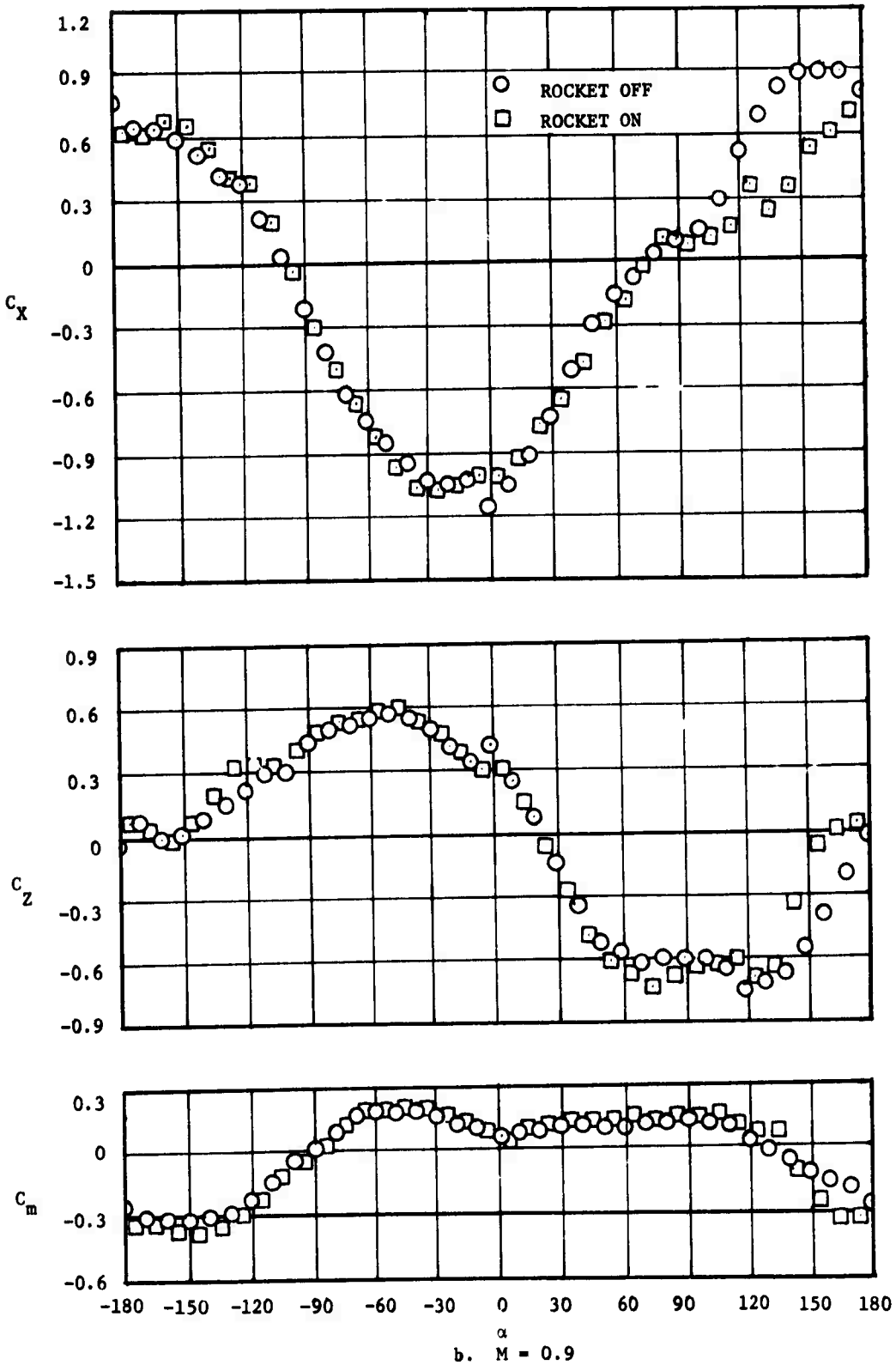


Figure 12. Definition of Standardized Body Axis System, Positive Aerodynamic Coefficients and Angles



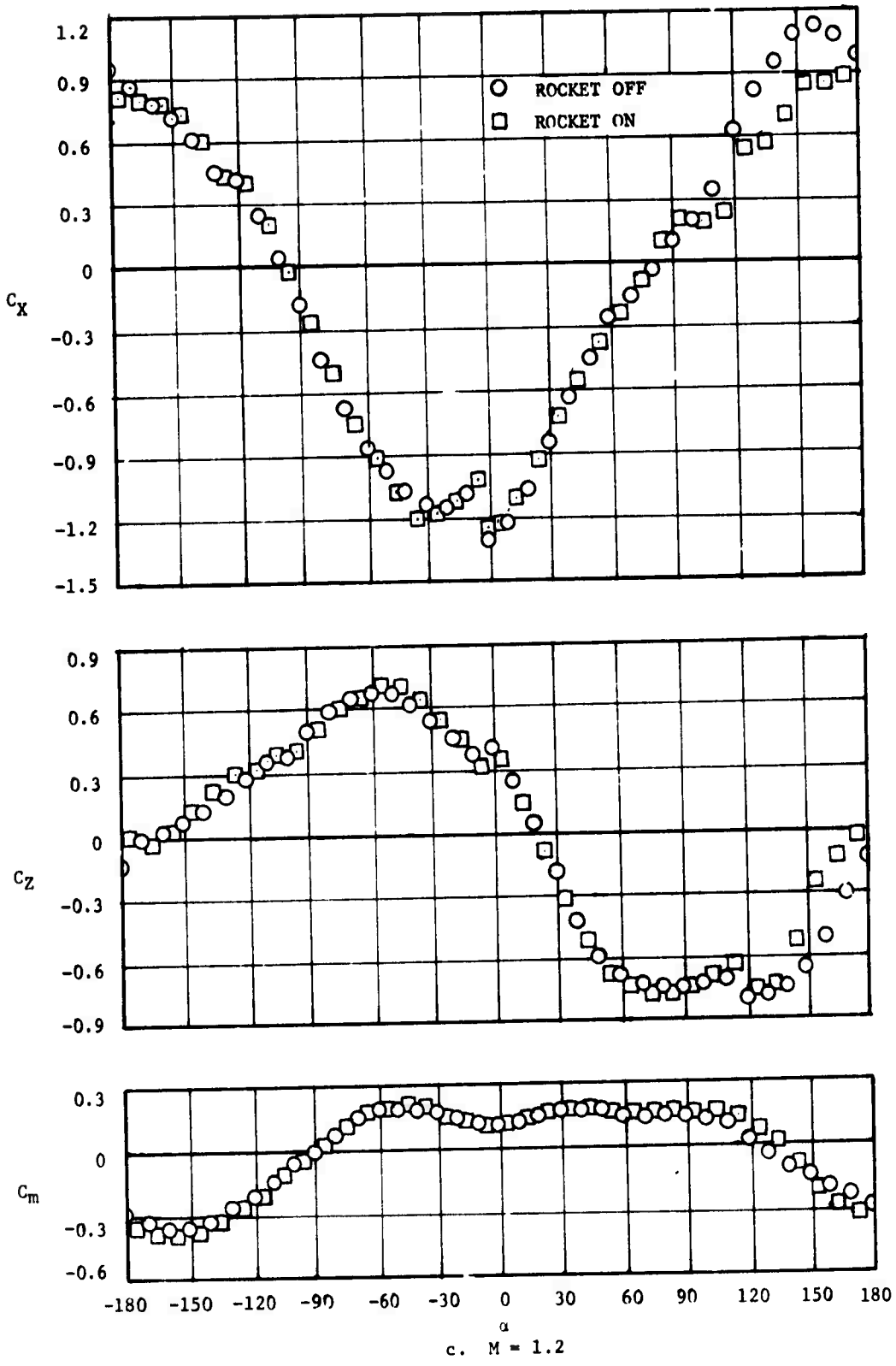
a. M = 0.6

Figure 13 Force and Moment Coefficients Versus Angle of Attack for Rocket-On and Rocket-Off Conditions, Sea Level Altitude, $\Psi = 0°$



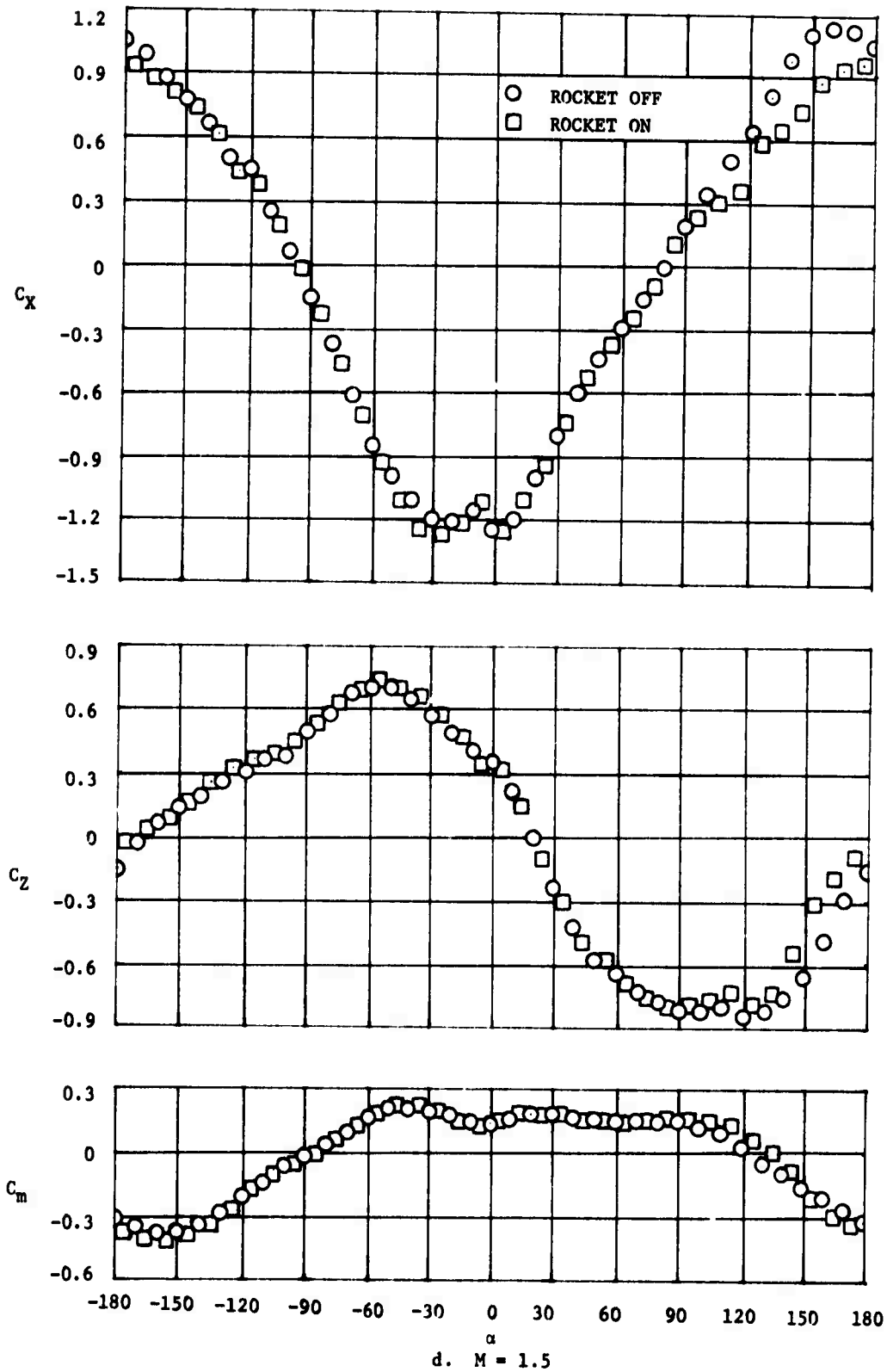
b. M = 0.9

Figure 13 Continued



c. M = 1.2

Figure 13 Continued



d. M = 1.5

Figure 13 Continued

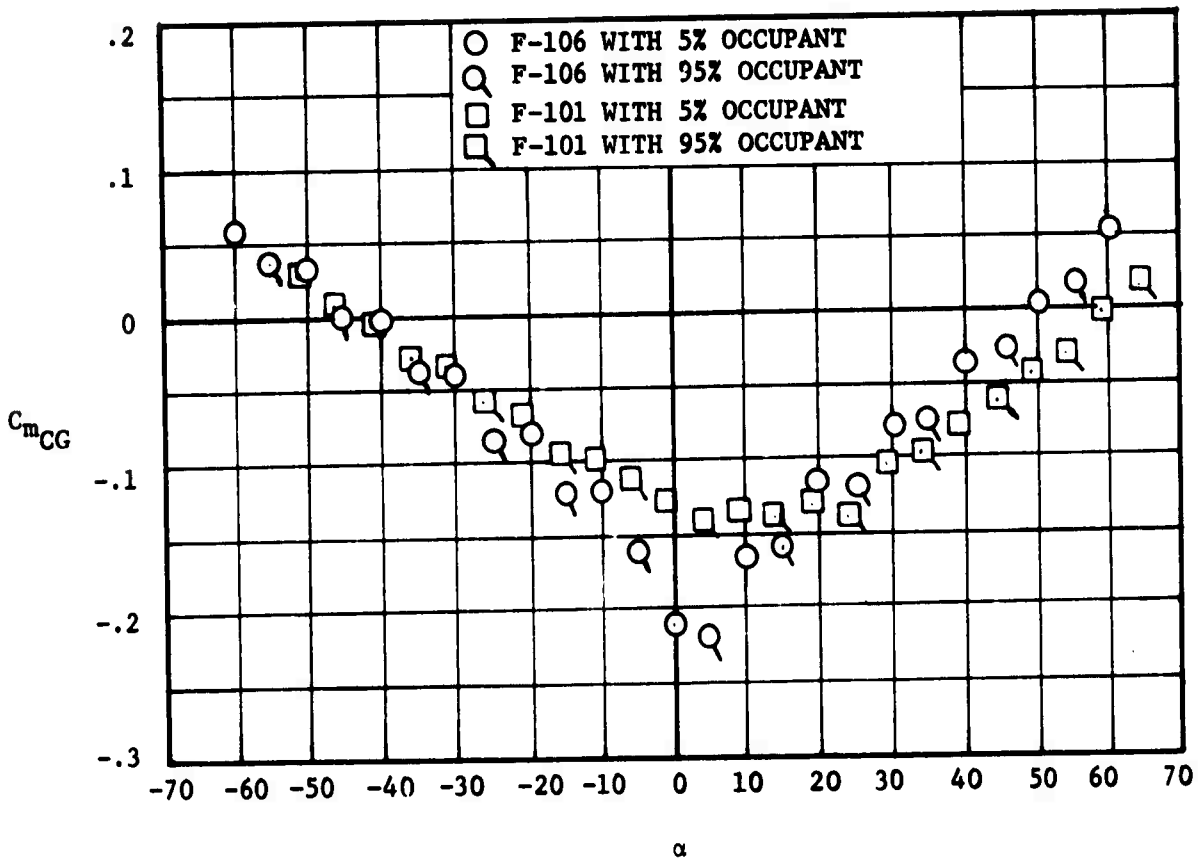


Figure 14 Pitching Moment Coefficient Versus Angle of Attack for Two Full Scale Ejection Seats, Moment Reference Center about Center of Gravity, $\Psi = 0°$

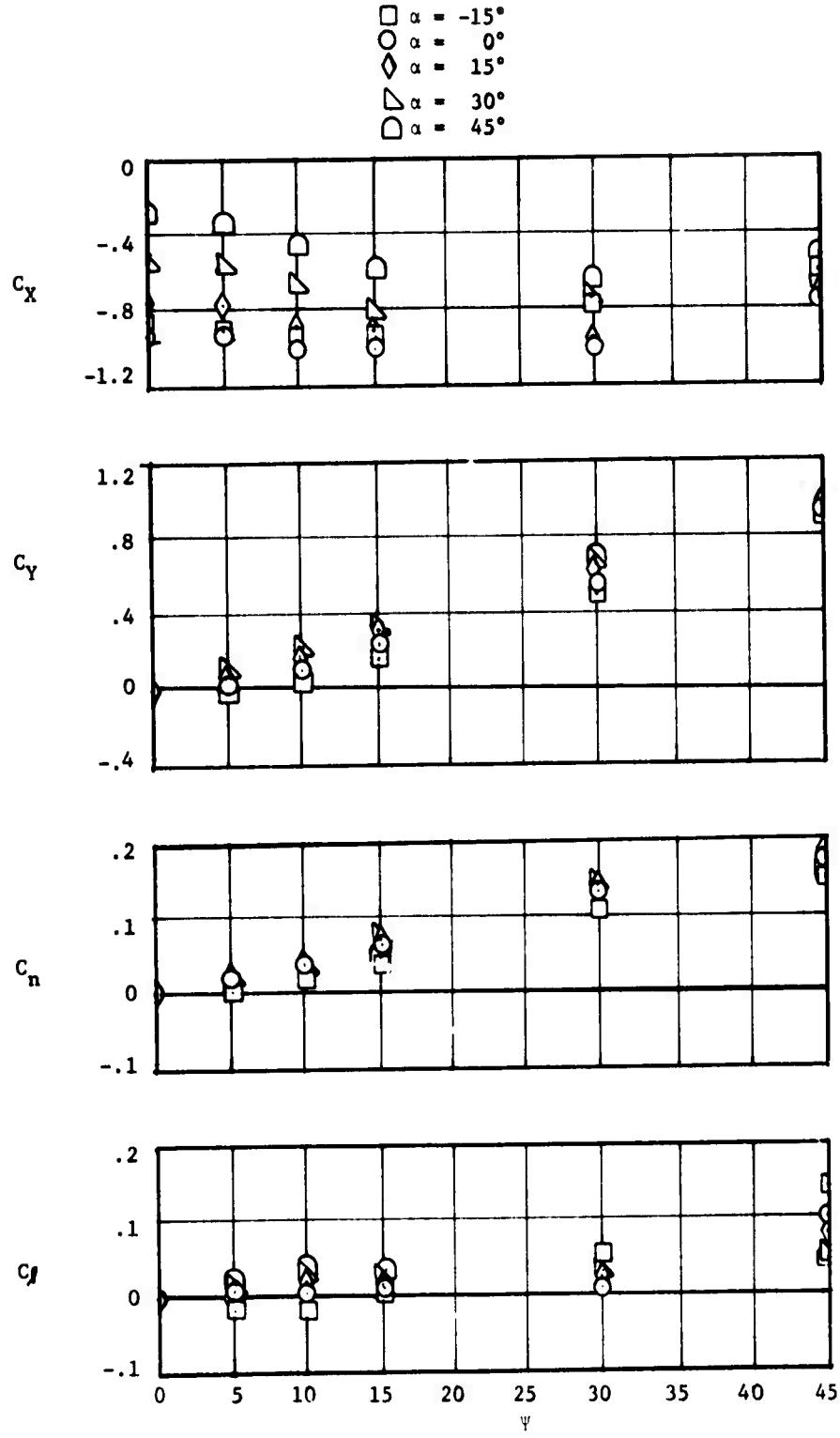
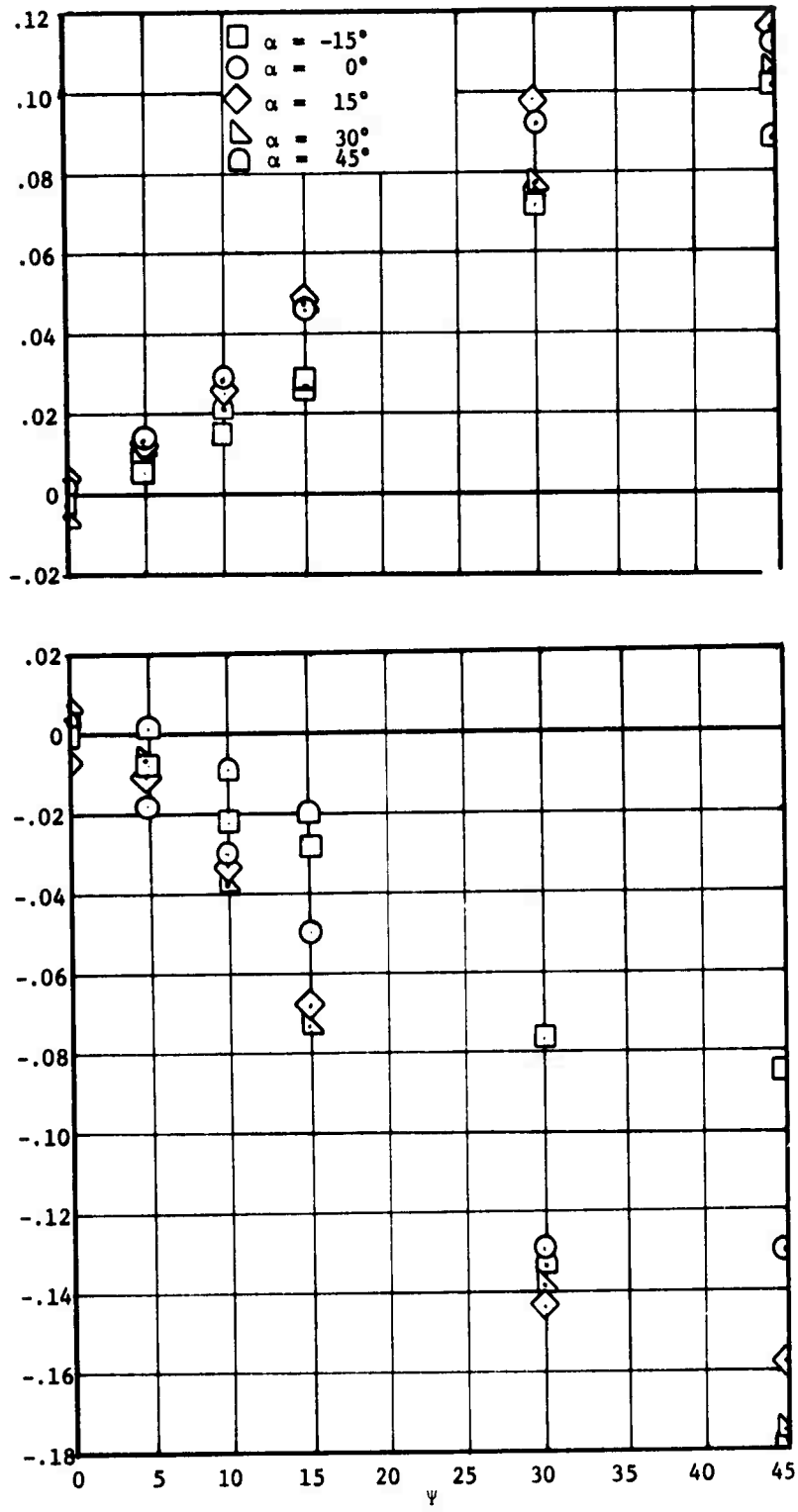
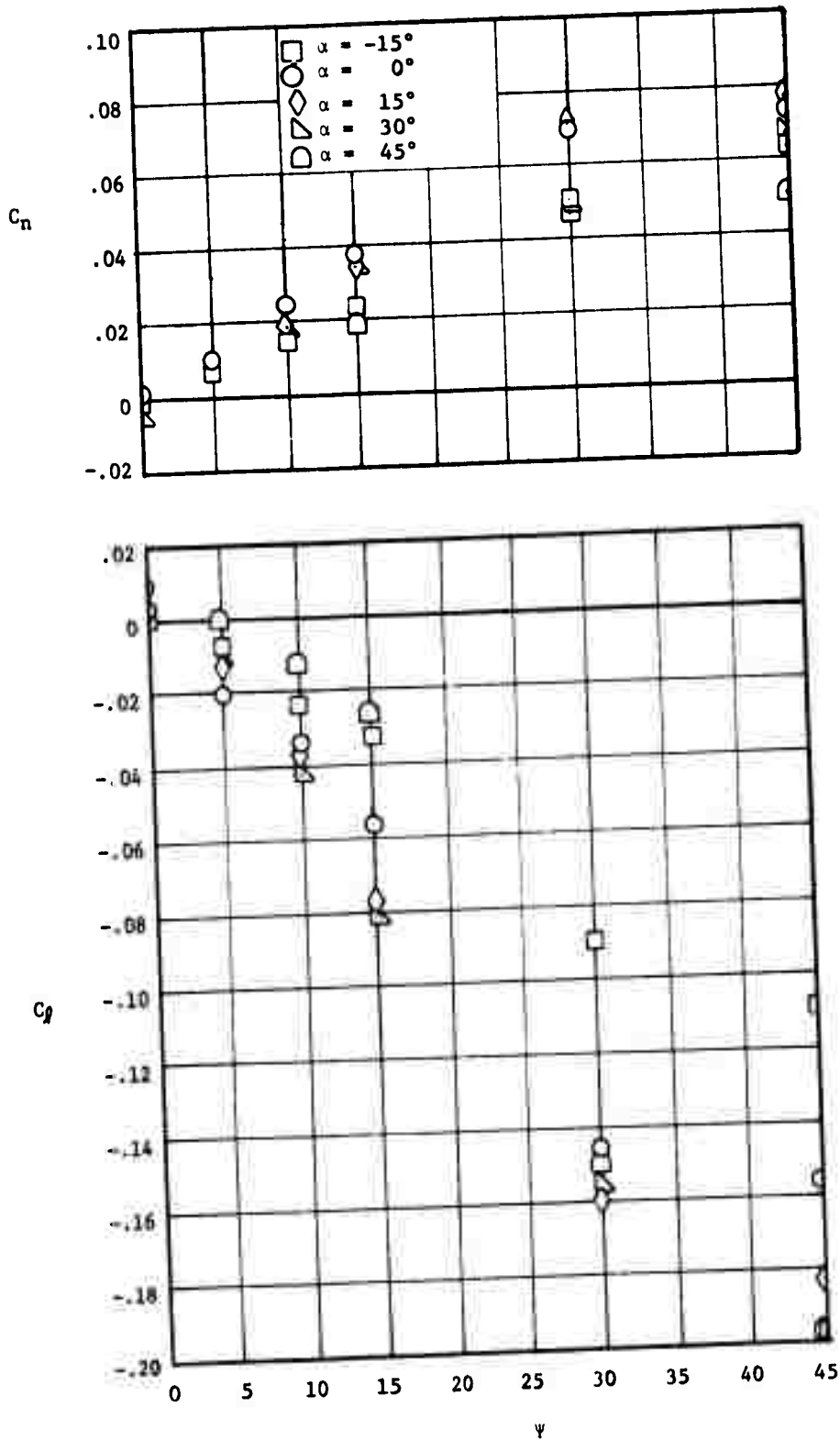


Figure 15 Force and Moment Coefficients Versus Angle of Yaw at Constant Angles of Attack, Moment Reference Center about Seat Reference Point, M = 0.6, Rocket-Off



a. Full Scale F-106 Ejection Seat Containing a 5th Percentile Dummy

Figure 16 Yawing and Rolling Moment Coefficients at Constant Angles of Attack with Center of Gravity as Moment Reference Center, M = 0.6, Rocket-Off



b. Full Scale F-101 Ejection Seat Containing a 95th Percentile Dummy

Figure 16 Continued

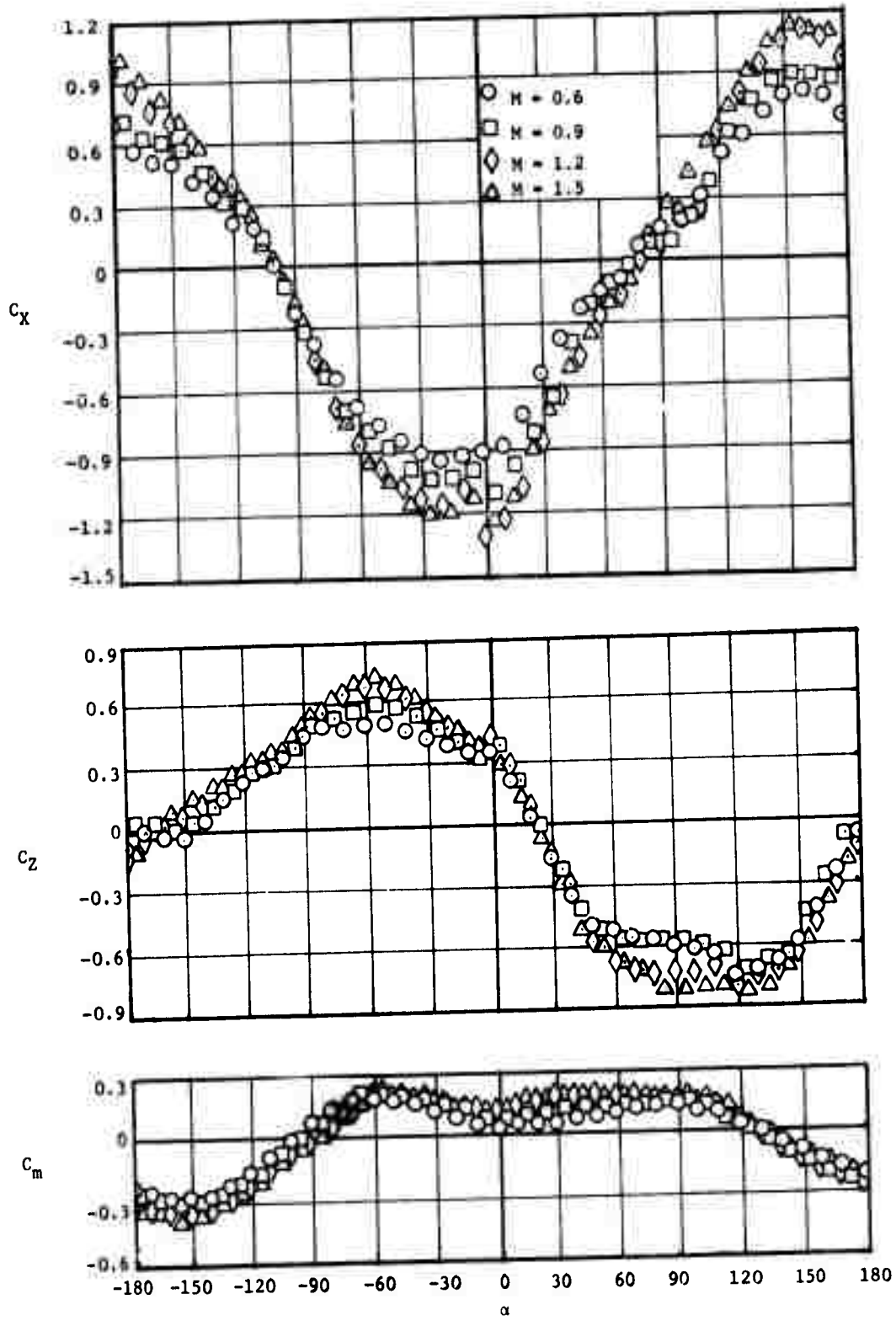


Figure 17 Effect of Mach Number on Force and Moment Coefficients Seat Reference Point as Moment Reference Center, Rocket Off, $\Psi = 0°$

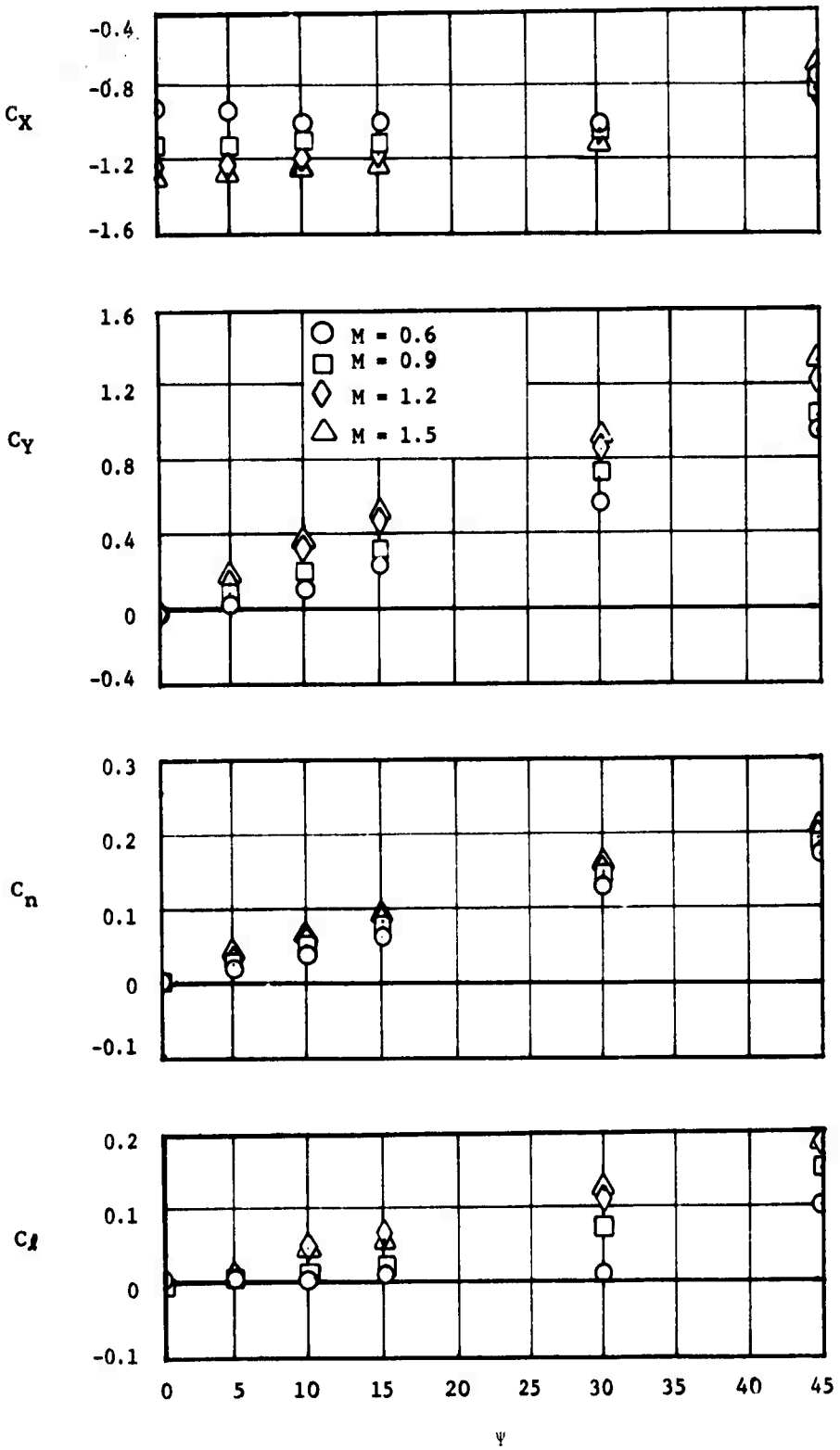


Figure 18 Force and Moment Coefficients Versus Angle of Yaw at Various Mach Numbers, Rocket-Off, $\alpha = 0°$

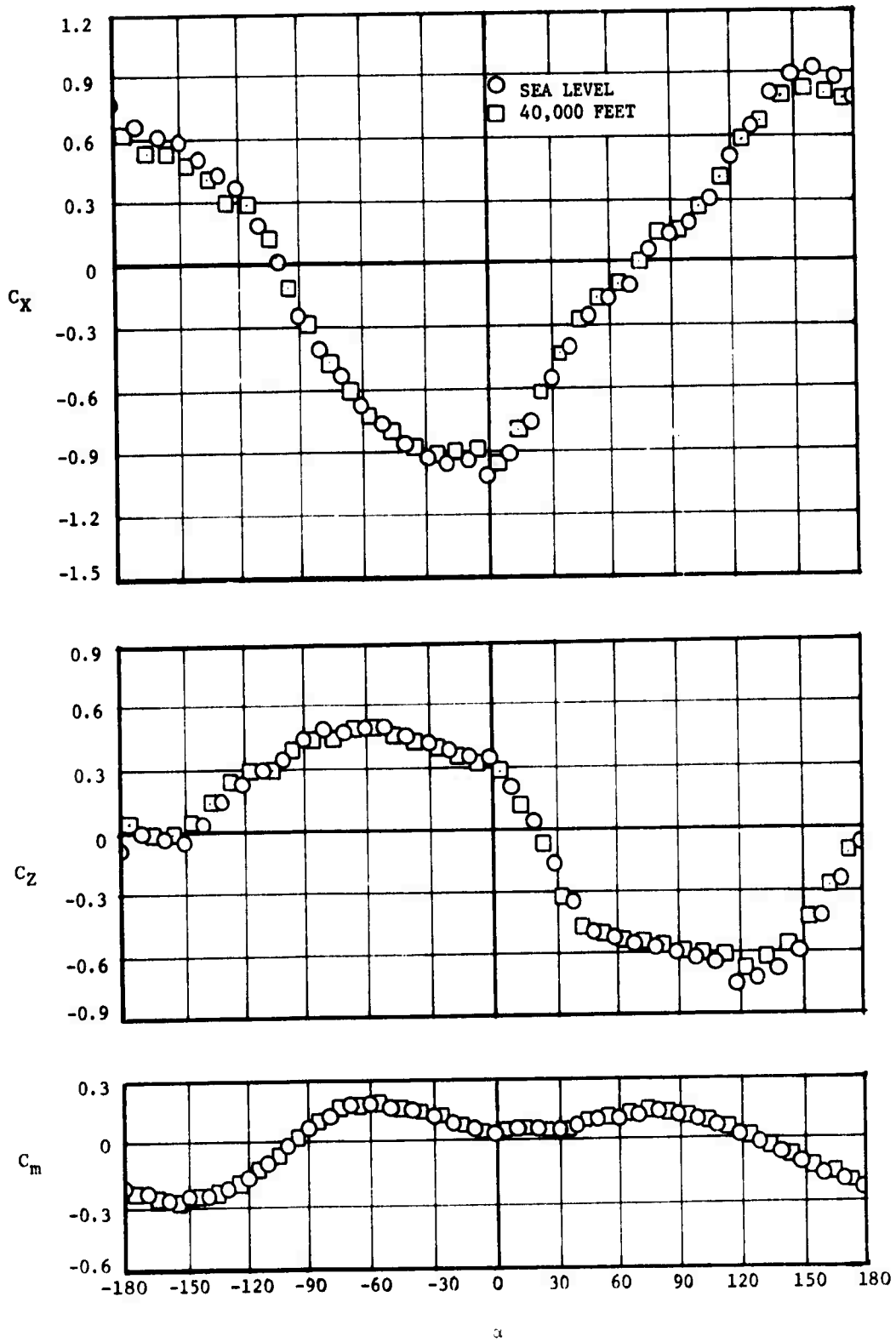


Figure 19 Effect of Altitude on Force and Moment Coefficients, Rocket-Off, M = 0.6, ψ = 0°

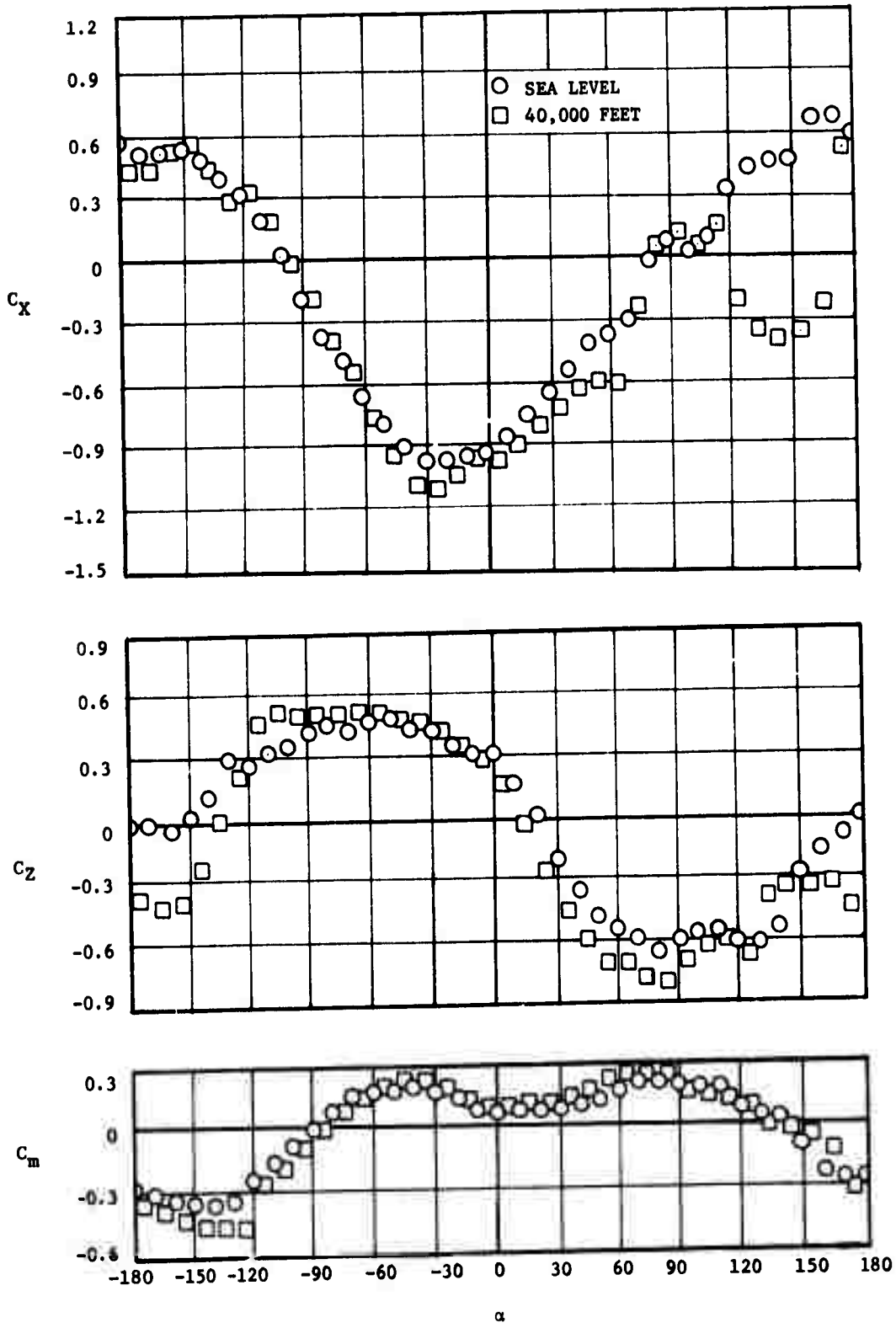
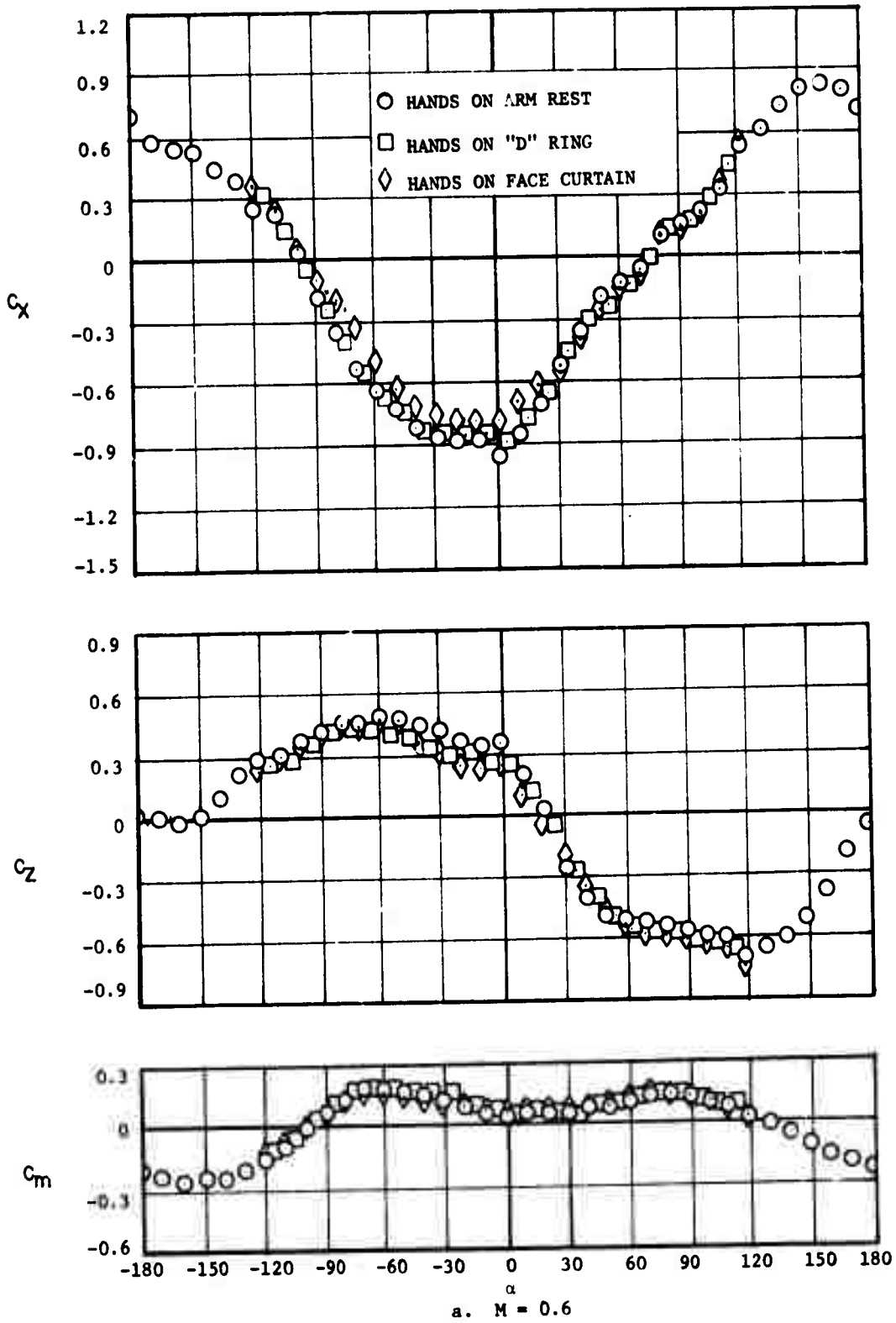
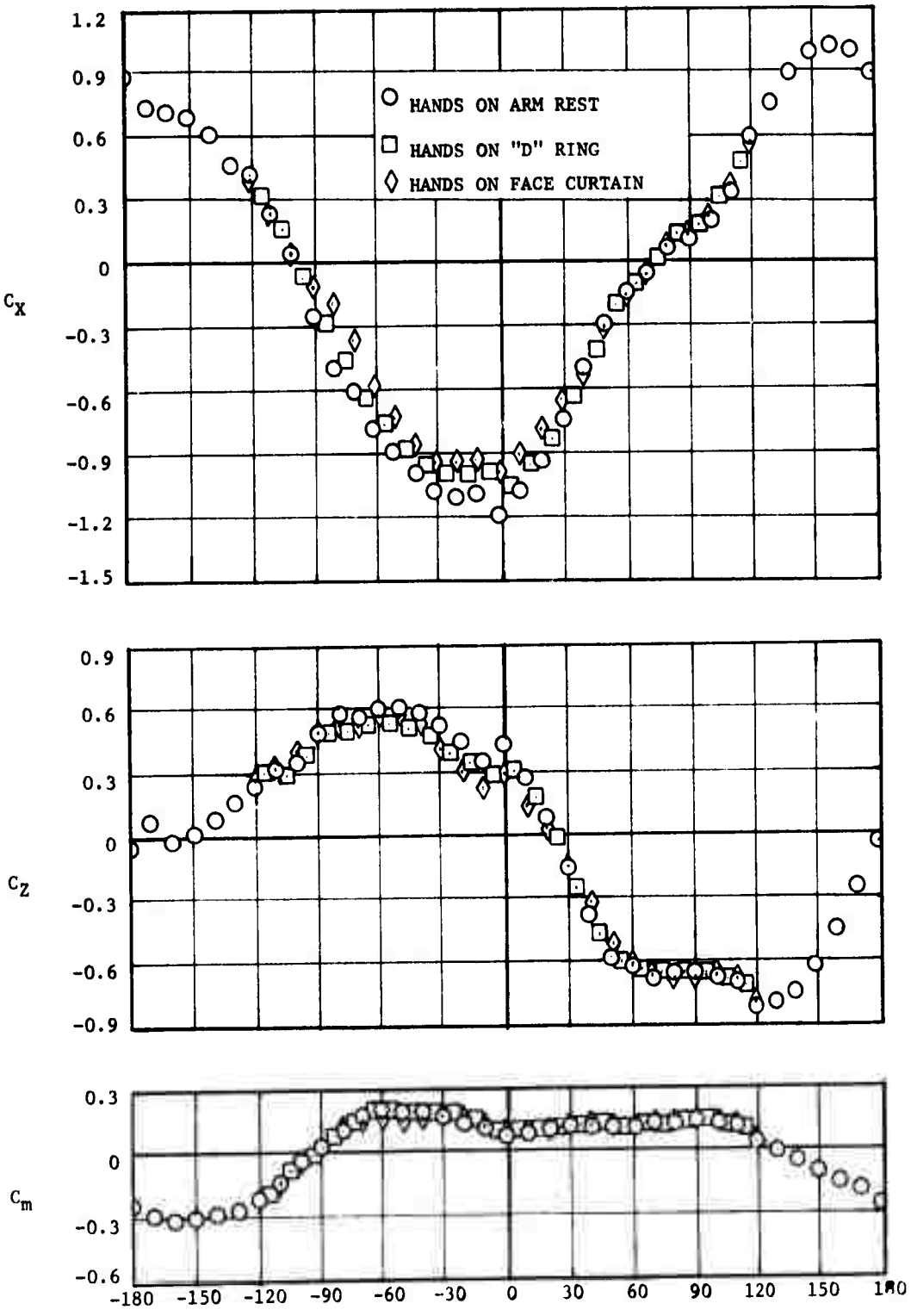


Figure 20 Effect of Altitude on Force and Moment Coefficients, Rocket-On, M = 0.6, Ψ = 0°



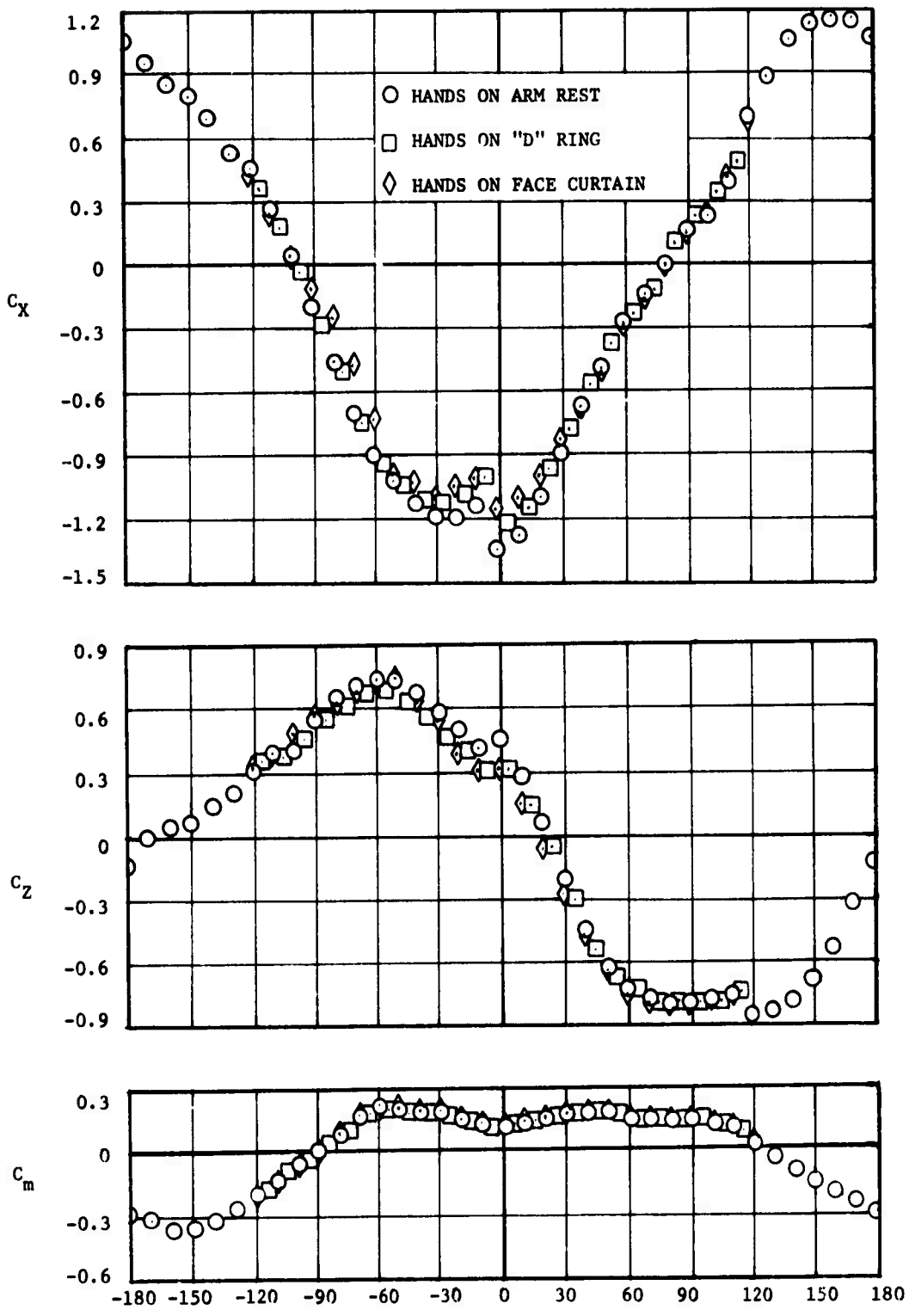
a. M = 0.6

Figure 21 Effect of Hand Position on Force and Moment Coefficients, Rocket-Off, Ψ = 0°



b. M = 0.9

Figure 21 Continued



c. M = 1.2

Figure 21 Continued

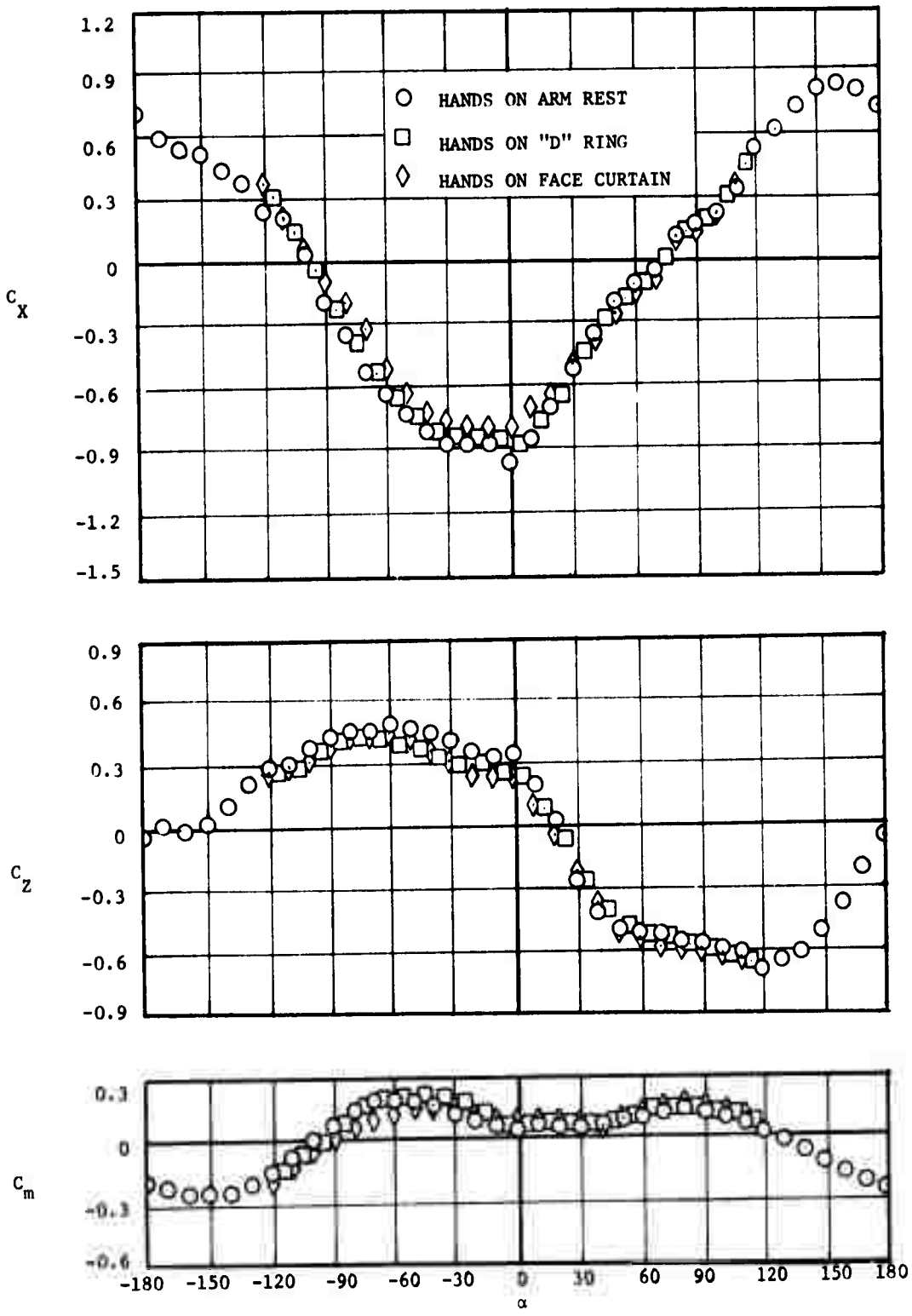


Figure 22 Effect of Hand Position on Force and Moment Coefficient with Variation of Projected Frontal Area, Rocket-Off, M = 0.6, Ψ = 0°

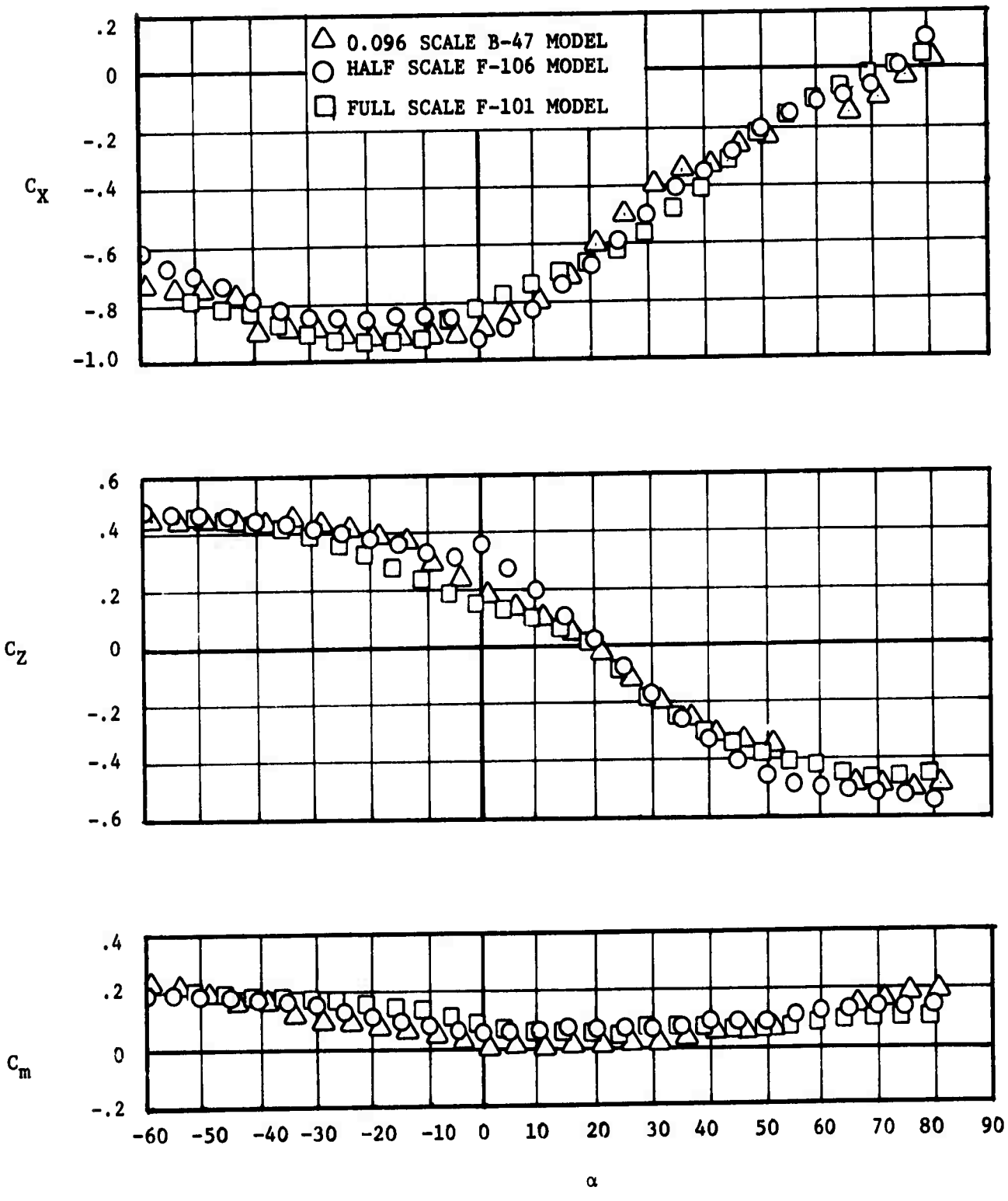


Figure 23 Comparison of Ejection Seat Wind Tunnel Data Between Full Scale, Half Scale, and 0.096 Scale Models, Moment Reference Center about Seat Reference Point, M = 0.6, $\Psi = 0°$

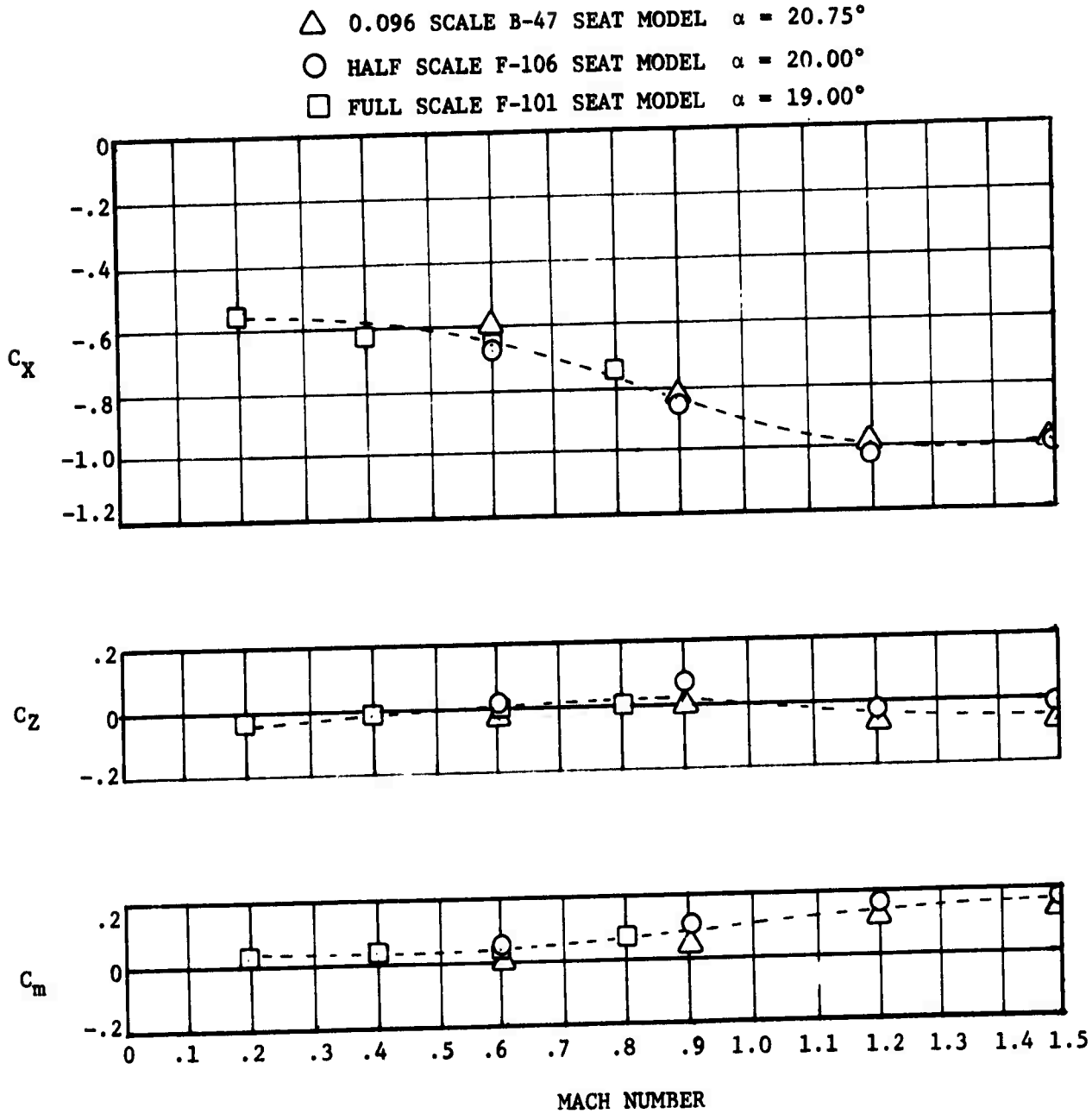
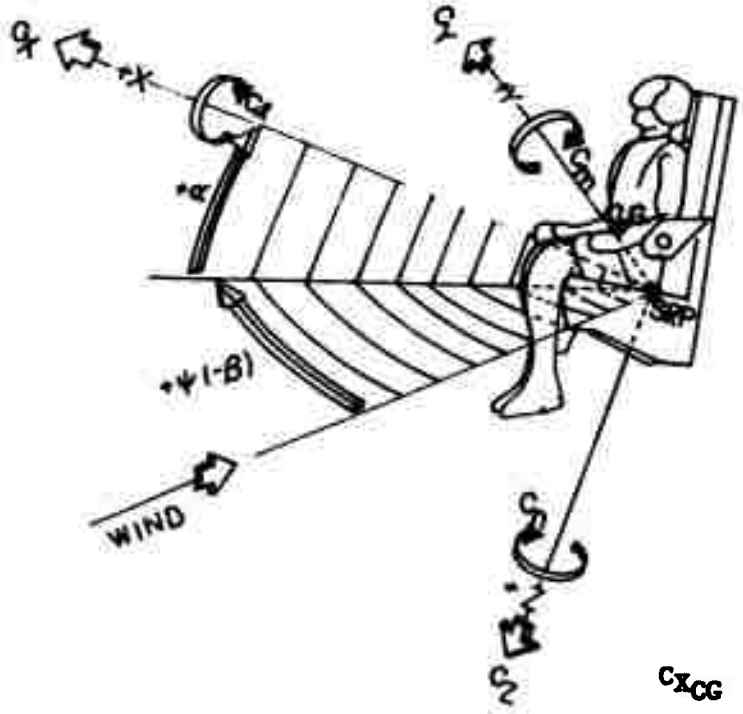
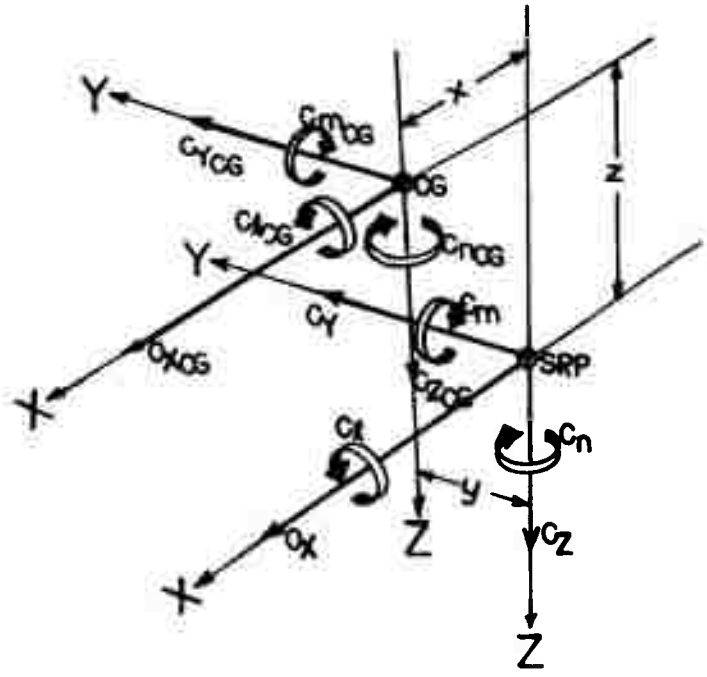


Figure 24 Comparison of Ejection Seat Data as a Function of Mach Number, Moment Reference Center about Seat Reference Point, Constant Angle of Attack, Rocket-Off, $\Psi = 0°$

APPENDIX

EJECTION SEAT AERODYNAMIC COEFFICIENTS





$$C_{X_{CG}} = C_X$$

$$C_{Y_{CG}} = C_Y$$

$$C_{Z_{CG}} = C_Z$$

$$C_{\ell_{CG}} = C_\ell - zC_Y/d - yC_Z/d$$

$$C_{m_{CG}} = C_m + xC_Z/d + zC_X/d$$

$$C_{n_{CG}} = C_n + yC_X/d - xC_Y/d$$

BODY AXIS SYSTEM AND TRANSFER OF AERODYNAMIC COEFFICIENTS FROM SEAT REFERENCE POINT TO SEAT CENTER OF GRAVITY

FULL SCALE F-101 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.2	-51.	0.	-.0036	.2955	-.0170	.1689	-.0051	-.0092
.2	-46.	0.	-.7011	.2607	-.0077	.1795	-.0066	-.0066
.2	-41.	0.	-.6947	.2871	-.0213	.1529	-.0058	-.0126
.2	-36.	0.	-.7244	.2644	-.0270	.1473	-.0077	-.0095
.2	-31.	0.	-.7532	.2586	-.0258	.1414	-.0100	-.0091
.2	-26.	0.	-.7634	.2284	-.0302	.1247	-.0151	-.0062
.2	-21.	0.	-.7634	.2091	-.0348	.1171	-.0131	-.0174
.2	-16.	0.	-.7439	.1602	-.0495	.1039	-.0141	-.0121
.2	-11.	0.	-.7545	.1514	-.0572	.0793	-.0156	-.0056
.2	-6.	0.	-.7410	.1356	-.0434	.0571	-.0172	-.0061
.2	-1.	0.	-.7130	.1531	-.0280	.0445	-.0133	-.0023
.2	4.	0.	-.6697	.1277	-.0295	.0305	-.0132	-.0040
.2	9.	0.	-.6213	.0787	-.0191	.0209	-.0061	-.0027
.2	14.	0.	-.5936	.0172	-.0170	.0186	-.0056	-.0017
.2	19.	0.	-.5815	-.0467	-.0041	.0252	-.0031	-.0028
.2	24.	0.	-.5154	-.1059	.0027	.0351	-.0005	-.0056
.2	29.	0.	-.4711	-.1789	.0065	.0477	.0050	-.0119
.2	34.	0.	-.4199	-.2486	.0027	.0545	.0061	-.0124
.2	39.	0.	-.3853	-.2913	-.0138	.0550	.0036	-.0127
.2	44.	0.	-.2973	-.3243	-.0113	.0542	.0049	-.0123
.2	49.	0.	-.2144	-.3485	-.0028	.0543	.0066	-.0103
.2	54.	0.	-.1739	-.3615	-.0012	.0503	.0040	-.0065
.2	59.	0.	-.1271	-.3815	.0068	.0643	.0053	-.0083
.2	64.	0.	-.0830	-.3954	.0133	.0710	.0050	-.0078
.2	69.	0.	-.0423	-.4103	.0164	.0734	.0046	-.0047
.2	74.	0.	-.0147	-.4094	.0068	.0773	.0031	-.0062
.2	79.	0.	.0267	-.4063	-.0012	.0737	.0024	-.0088

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.2	-26.	-5.	-.7785	.2462	.0262	.1258	.0075	-.0160
.2	-21.	-5.	-.7465	.2012	.0378	.1094	.0123	-.0170
.2	-16.	-5.	-.7582	.1805	.0167	.1018	.0096	-.0227
.2	-11.	-5.	-.7273	.1964	.0361	.0647	.0061	-.0126
.2	-6.	-5.	-.7252	.2000	.0566	.0516	.0051	-.0048
.2	-1.	-5.	-.7027	.1669	.0802	.0443	.0072	-.0015
.2	4.	-5.	-.6655	.1252	.0755	.0296	.0128	-.0064
.2	9.	-5.	-.6159	.0753	.0847	.0197	.0179	-.0075
.2	14.	-5.	-.5841	.0192	.0694	.0204	.0170	-.0085
.2	-26.	-10.	-.7445	.2349	.1031	.1254	.0265	-.0152
.2	-21.	-10.	-.7573	.2256	.0863	.1143	.0293	-.0246
.2	-16.	-10.	-.7355	.1994	.1018	.0949	.0316	-.0292
.2	-11.	-10.	-.7347	.1960	.1270	.0872	.0329	-.0243
.2	-6.	-10.	-.7125	.1948	.1645	.0584	.0343	-.0036
.2	-1.	-10.	-.6921	.1597	.1704	.0453	.0357	-.0060
.2	4.	-10.	-.6496	.1225	.1635	.0328	.0366	-.0118
.2	9.	-10.	-.6280	.0802	.1718	.0274	.0430	-.0151
.2	14.	-10.	-.5733	.0142	.1746	.0259	.0433	-.0177
.2	-26.	-15.	-.7350	.2133	.1764	.1426	.0375	-.0007
.2	-21.	-15.	-.7472	.2131	.1793	.1223	.0445	-.0113
.2	-16.	-15.	-.7501	.2181	.1984	.1046	.0490	-.0220
.2	-11.	-15.	-.7242	.1991	.2136	.0915	.0521	-.0192
.2	-6.	-15.	-.7211	.1759	.2405	.0758	.0534	-.0082
.2	-1.	-15.	-.6930	.1431	.2580	.0655	.0563	-.0033
.2	4.	-15.	-.6385	.1038	.2406	.0469	.0581	-.0097
.2	9.	-15.	-.6077	.0603	.2426	.0381	.0639	-.0187
.2	14.	-15.	-.5689	.0020	.2677	.0371	.0680	-.0203

FULL SCALE F-101 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.2	-26.	-20.	-.7338	.2087	.2716	.1528	.0451	.0284
.2	-21.	-20.	-.7451	.2077	.2752	.1352	.0553	.0102
.2	-16.	-20.	-.7541	.2267	.3381	.1126	.0692	-.0063
.2	-11.	-20.	-.7247	.1484	.3120	.0987	.0694	-.0099
.2	-6.	-20.	-.7109	.1699	.3431	.0766	.0759	.0008
.2	-1.	-20.	-.6871	.1363	.3588	.0698	.0736	-.0009
.2	4.	-20.	-.6296	.0441	.3411	.0572	.0700	-.0020
.2	9.	-20.	-.6010	.0445	.3589	.0453	.0853	-.0155
.2	14.	-20.	-.5614	-.0174	.3618	.0471	.0855	-.0199
.2	-26.	-25.	-.7276	.2197	.3751	.1527	.0618	.0460
.2	-21.	-25.	-.7455	.1940	.3800	.1510	.0696	.0334
.2	-16.	-25.	-.7242	.1741	.3840	.1351	.0767	.0213
.2	-11.	-25.	-.6942	.1345	.3920	.1233	.0780	.0113
.2	-6.	-25.	-.6718	.1281	.4241	.1020	.0953	.0061
.2	-1.	-25.	-.6409	.0995	.4140	.0794	.0903	.0032
.2	4.	-25.	-.6145	.0661	.4142	.0634	.0842	-.0019
.2	9.	-25.	-.5478	.0285	.4302	.0558	.0973	-.0144
.2	14.	-25.	-.5435	-.0283	.4175	.0542	.0935	-.0140
.2	-26.	-30.	-.7142	.2291	.4894	.1500	.0926	.0031
.2	-21.	-30.	-.6849	.2015	.4717	.1347	.0860	.0444
.2	-16.	-30.	-.6939	.1881	.4906	.1353	.0984	.0321
.2	-11.	-30.	-.6419	.1463	.4824	.1331	.0988	.0222
.2	-6.	-30.	-.6735	.1179	.4844	.1125	.1043	.0122
.2	-1.	-30.	-.6417	.0774	.4838	.1036	.1018	.0019
.2	4.	-30.	-.6207	.0562	.4654	.0827	.0968	-.0042
.2	9.	-30.	-.6075	.0101	.4788	.0716	.1027	-.0124
.2	14.	-30.	-.5478	-.0131	.4912	.0607	.1049	-.0100
.2	-26.	-35.	-.6437	.2178	.5899	.1354	.1013	.0842
.2	-21.	-35.	-.6599	.1894	.5878	.1312	.1099	.0661
.2	-16.	-35.	-.6793	.1718	.5841	.1279	.1130	.0535
.2	-11.	-35.	-.6623	.1519	.5819	.1180	.1150	.0409
.2	-6.	-35.	-.6593	.1233	.5605	.1119	.1102	.0236
.2	-1.	-35.	-.6604	.0771	.5429	.1114	.1032	.0162
.2	4.	-35.	-.6157	.0455	.5511	.1012	.1139	.0051
.2	9.	-35.	-.5920	.0266	.5580	.0797	.1148	-.0043
.2	14.	-35.	-.5233	-.0012	.5812	.0683	.1209	-.0006
.2	-26.	-40.	-.5983	.2005	.7005	.1235	.1202	.1084
.2	-21.	-40.	-.6142	.1824	.6769	.1245	.1223	.0885
.2	-16.	-40.	-.6224	.1691	.6408	.1125	.1178	.0727
.2	-11.	-40.	-.6333	.1499	.6507	.1088	.1172	.0621
.2	-6.	-40.	-.6111	.1092	.6283	.0995	.1150	.0461
.2	-1.	-40.	-.6030	.0782	.6386	.0993	.1200	.0358
.2	4.	-40.	-.5820	.0525	.6486	.0850	.1223	.0315
.2	9.	-40.	-.5507	.0218	.6574	.0768	.1275	.0202
.2	14.	-40.	-.4880	-.0204	.6780	.0689	.1386	.0085
.2	-11.	-45.	-.5674	.1349	.7302	.0992	.1280	.0888
.2	-6.	-45.	-.5795	.1122	.7287	.0989	.1323	.0753

FULL SCALE F-101 EJECTION SEAT AERODYNAMIC COEFFICIENTS

HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.4	-31.	0.	-.7014	.3419	-.0367	.1793	-.0126	-.0097
.4	-46.	0.	-.7231	.3378	.0109	.1653	-.0057	-.0077
.4	-41.	0.	-.7214	.3425	-.0371	.1493	-.0131	-.0151
.4	-36.	0.	-.7039	.3236	-.0482	.1451	-.0136	-.0148
.4	-31.	0.	-.7868	.3112	-.0484	.1372	-.0154	-.0091
.4	-26.	0.	-.8022	.2794	-.0477	.1306	-.0156	-.0060
.4	-21.	0.	-.8141	.2594	-.0429	.1228	-.0156	-.0050
.4	-16.	0.	-.8178	.2129	-.0344	.1126	-.0107	-.0061
.4	-11.	0.	-.8194	.1722	-.0219	.1036	-.0148	-.0099
.4	-6.	0.	-.7823	.1423	-.0214	.0734	-.0142	-.0119
.4	-1.	0.	-.7235	.1075	-.0253	.0491	-.0102	-.0017
.4	4.	0.	-.7377	.1505	-.0247	.0234	-.0071	-.0043
.4	9.	0.	-.6991	.0824	-.0253	.0215	-.0103	-.0026
.4	14.	0.	-.6276	.0284	-.0193	.0238	-.0028	-.0051
.4	19.	0.	-.5408	-.0368	-.0111	.0334	-.0052	-.0065
.4	24.	0.	-.6459	-.1048	.0036	.0425	.0042	-.0100
.4	29.	0.	-.5033	-.1784	.0154	.0554	.0095	-.0133
.4	34.	0.	-.4491	-.2337	-.0139	.0618	.0052	-.0131
.4	39.	0.	-.4316	-.2764	-.0125	.0625	.0093	-.0113
.4	44.	0.	-.3956	-.3297	-.0128	.0637	.0076	-.0118
.4	49.	0.	-.2131	-.3653	-.0128	.0547	.0089	-.0101
.4	54.	0.	-.1594	-.3814	-.0015	.0624	.0070	-.0072
.4	59.	0.	-.1229	-.4014	.0045	.0732	.0075	-.0086
.4	64.	0.	-.0748	-.4215	.0155	.0795	.0066	-.0026
.4	69.	0.	-.0373	-.4362	.0110	.0851	.0050	-.0053
.4	74.	0.	-.0010	-.4523	.0124	.0829	.0058	-.0072
.4	77.	0.	.0235	-.4295	-.0035	.0826	.0035	-.0081
.4	-26.	-5.	-.4125	.2841	.0071	.1319	.0209	-.0039
.4	-21.	-5.	-.4144	.2668	.0029	.1225	.0174	-.0131
.4	-16.	-5.	-.5340	.2172	.0467	.1113	.0168	-.0172
.4	-11.	-5.	-.7849	.1845	.0546	.0969	.0118	-.0122
.4	-6.	-5.	-.7723	.1491	.0514	.0891	.0086	-.0074
.4	-1.	-5.	-.7573	.1125	.0381	.0535	.0131	-.0045
.4	4.	-5.	-.7129	.1212	.0688	.0373	.0194	-.0109
.4	9.	-5.	-.6634	.0848	.0815	.0251	.0255	-.0099
.4	14.	-5.	-.6341	.0374	.0731	.0265	.0232	-.0121
.4	24.	-5.	-.5857	-.1085	.0984	.0447	.0324	-.0220
.4	34.	-5.	-.4634	-.2413	.0790	.0610	.0183	-.0177
.4	44.	-5.	-.3063	-.3349	.0689	.0628	.0205	-.0099
.4	54.	-5.	-.1803	-.3852	.0663	.0659	.0207	-.0111
.4	-26.	-10.	-.8023	.2862	.1192	.1339	.0390	-.0057
.4	-21.	-10.	-.8070	.2676	.1156	.1203	.0400	-.0154
.4	-16.	-10.	-.8100	.2265	.1329	.1145	.0438	-.0191
.4	-11.	-10.	-.8026	.1962	.1352	.1082	.0407	-.0167
.4	-6.	-10.	-.7839	.1742	-.1621	.0891	.1020	-.1058
.4	-1.	-10.	-.7426	.1519	.1767	.0574	.0470	-.0098
.4	4.	-10.	-.7089	.1186	.1592	.0444	.0464	-.0152
.4	9.	-10.	-.6690	.0865	.1683	.0324	.0545	-.0189
.4	14.	-10.	-.6327	.0314	.1582	.0325	.0501	-.0246
.4	24.	-10.	-.5834	-.1011	.1779	.0437	.0504	-.0313
.4	34.	-10.	-.4557	-.2232	.1665	.0604	.0385	-.0262
.4	44.	-10.	-.3128	-.3215	.1517	.0697	.0347	-.0136
.4	54.	-10.	-.1843	-.3925	.1433	.0744	.0344	-.0128
.4	-26.	-15.	-.8042	.2571	.1958	.1508	.0443	.0095
.4	-21.	-15.	-.7976	.2569	.1979	.1326	.0570	-.0057
.4	-16.	-15.	-.7874	.2271	.2123	.1166	.0612	-.0034
.4	-11.	-15.	-.7827	.2087	.2255	.1029	.0680	-.0202
.4	-6.	-15.	-.7703	.1677	.2350	.0950	.0652	-.0201
.4	-1.	-15.	-.7388	.1350	.2675	.0767	.0709	-.0091
.4	4.	-15.	-.6995	.1106	.2485	.0503	.0725	-.0222
.4	9.	-15.	-.6719	.0764	.2469	.0427	.0789	-.0286
.4	14.	-15.	-.6262	.0188	.2650	.0422	.0788	-.0327
.4	24.	-15.	-.5728	-.0949	.2745	.0507	.0762	-.0412
.4	34.	-15.	-.4423	-.2181	.2581	.0595	.0634	-.0351
.4	44.	-15.	-.3001	-.3208	.2433	.0698	.0537	-.0210
.4	54.	-15.	-.1876	-.4041	.2389	.0800	.0527	-.0181

FULL SCALE F-101 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.4	-26.	-20.	-.4091	.2477	.2357	.1637	.0204	.0321
.4	-21.	-20.	-.7342	.2286	.2429	.1549	.0085	.0173
.4	-16.	-20.	-.7447	.2104	.3029	.1399	.0754	.0342
.4	-11.	-20.	-.7313	.1736	.2347	.1161	.0742	-.0064
.4	-6.	-20.	-.7247	.1428	.3462	.0967	.0877	-.0358
.4	-1.	-20.	-.7245	.1373	.3261	.0744	.0949	-.0088
.4	4.	-20.	-.6917	.0997	.3476	.0577	.0825	-.0211
.4	9.	-20.	-.6553	.0464	.3443	.0511	.0492	-.0293
.4	14.	-20.	-.6121	.0063	.3560	.0535	.0369	-.0331
.4	24.	-20.	-.5579	-.0415	.3425	.0622	.0401	-.0418
.4	34.	-20.	-.4584	-.2111	.3750	.0644	.0340	-.0435
.4	44.	-20.	-.2910	-.3232	.3913	.0703	.0769	-.0314
.4	54.	-20.	-.1721	-.4135	.3410	.0873	.0718	-.0153
.4	-26.	-25.	-.7344	.2442	.2160	.1694	.0777	.0564
.4	-21.	-25.	-.7332	.2171	.3374	.1575	.0705	.0428
.4	-16.	-25.	-.7842	.1803	.3442	.1536	.0849	.0314
.4	-11.	-25.	-.7741	.1362	.3437	.1385	.0959	.0185
.4	-6.	-25.	-.7356	.1328	.4224	.1121	.1017	.0104
.4	-1.	-25.	-.7153	.1167	.4222	.0955	.1049	-.0045
.4	4.	-25.	-.6861	.0884	.4195	.0711	.1012	-.0204
.4	9.	-25.	-.6561	.0596	.4137	.0652	.1046	-.0268
.4	14.	-25.	-.6146	.0267	.4313	.0615	.1049	-.0345
.4	24.	-25.	-.5223	-.1065	.4552	.0734	.1045	-.0392
.4	34.	-25.	-.4211	-.1981	.4536	.0644	.1087	-.0392
.4	44.	-25.	-.2956	-.3015	.4491	.0799	.1025	-.0289
.4	54.	-25.	-.1570	-.3974	.4412	.0843	.0897	-.0231
.4	-26.	-30.	-.7559	.2546	.3194	.1549	.0916	.0402
.4	-21.	-30.	-.7639	.2134	.4483	.1510	.0933	.0635
.4	-16.	-30.	-.7557	.1823	.4452	.1457	.1022	.0492
.4	-11.	-30.	-.7379	.1745	.4496	.1253	.1025	.0370
.4	-6.	-30.	-.7107	.1257	.4437	.1239	.1001	.0226
.4	-1.	-30.	-.7157	.1556	.4911	.1091	.1100	.0041
.4	4.	-30.	-.6825	.0951	.4446	.0990	.1137	-.0139
.4	9.	-30.	-.6582	.0568	.4855	.0752	.1161	-.0158

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.4	14.	-30.	-.6130	.0106	.5147	.0705	.1196	-.0195
.4	24.	-30.	-.5139	-.1044	.5473	.0615	.1184	-.0260
.4	34.	-30.	-.4249	-.1846	.5680	.0701	.1255	-.0312
.4	44.	-30.	-.2890	-.2884	.5999	.0679	.1136	-.0143
.4	54.	-30.	-.1607	-.3867	.5369	.0853	.1051	-.0267
.4	-26.	-35.	-.7251	.2589	.6219	.1403	.1084	.1021
.4	-21.	-35.	-.7190	.2216	.6073	.1337	.1083	.0862
.4	-16.	-35.	-.7228	.1972	.5931	.1267	.1150	.0730
.4	-11.	-35.	-.7125	.1834	.5854	.1159	.1163	.0540
.4	-6.	-35.	-.6979	.1372	.5596	.1181	.1128	.0359
.4	-1.	-35.	-.6963	.1162	.5683	.1038	.1238	.0170
.4	4.	-35.	-.6632	.0702	.5682	.0983	.1206	.0094
.4	9.	-35.	-.6375	.0559	.5704	.0828	.1274	-.0019
.4	14.	-35.	-.5857	.0152	.6176	.0693	.1327	.0009
.4	24.	-35.	-.4958	-.0867	.6329	.0838	.1279	-.0071
.4	34.	-35.	-.4023	-.1834	.6597	.0663	.1367	-.0162
.4	44.	-35.	-.2678	-.2758	.6861	.0615	.1257	-.0070
.4	54.	-35.	-.1422	-.3688	.6233	.0835	.1156	-.0202
.4	-26.	-40.	-.6665	.2443	.7290	.1271	.1251	.1256
.4	-21.	-40.	-.6608	.2119	.7121	.1199	.1261	.1105
.4	-16.	-40.	-.6762	.2067	.6905	.1126	.1285	.0919
.4	-11.	-40.	-.6619	.1775	.6788	.1065	.1290	.0750
.4	-6.	-40.	-.6657	.1446	.6595	.1065	.1266	.0581
.4	-1.	-40.	-.6454	.1113	.6569	.0972	.1310	.0449
.4	4.	-40.	-.6274	.0748	.6640	.0933	.1347	.0283
.4	9.	-40.	-.5835	.0411	.6712	.0816	.1358	.0225
.4	14.	-40.	-.5450	.0058	.6904	.0695	.1415	.0185
.4	24.	-40.	-.4843	-.0766	.7225	.0902	.1398	.0118
.4	34.	-40.	-.3869	-.1670	.7481	.0683	.1464	.0020
.4	44.	-40.	-.2549	-.2561	.7577	.0625	.1294	.0076
.4	54.	-40.	-.1130	-.3448	.7161	.0712	.1234	-.0027
.4	-11.	-45.	-.6130	.1740	.7835	.0978	.1427	.0995
.4	-6.	-45.	-.5982	.1362	.7643	.0958	.1420	.0832

FULL SCALE F-101 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	-51.	0.	-.7488	.4454	-.0572	.1988	-.0010	-.0112
.9	-46.	0.	-.4106	.4311	-.0815	.1921	-.0052	-.0129
.9	-41.	0.	-.3329	.4198	-.0720	.1784	-.0017	-.0112
.9	-36.	0.	-.4721	.3997	-.0308	.1777	.0047	-.0037
.9	-31.	0.	-.9113	.3829	-.0062	.1747	.0075	.0001
.9	-26.	0.	-.9276	.3463	.0409	.1575	.0171	.0033
.9	-21.	0.	-.9446	.3127	.0452	.1593	.0224	.0028
.9	-16.	0.	-.9437	.2722	.0348	.1454	.0240	-.0039
.9	-11.	0.	-.9345	.2289	.0489	.1333	.0295	-.0068
.9	-6.	0.	-.8955	.1877	.0285	.1032	.0304	-.0102
.9	-1.	0.	-.8747	.1764	.0245	.0859	.0323	-.0126
.9	4.	0.	-.8549	.1940	.0350	.0748	.0344	-.0114
.9	9.	0.	-.8059	.1164	.0422	.0665	.0365	-.0114
.9	14.	0.	-.7624	.0959	.0483	.0625	.0399	-.0127
.9	19.	0.	-.7308	-.0112	.0592	.0609	.0355	-.0122
.9	24.	0.	-.6843	-.0837	.0159	.0753	.0277	-.0097
.9	29.	0.	-.6250	-.1780	.0243	.0777	.0242	-.0130
.9	34.	0.	-.5053	-.2438	-.0053	.0728	.0036	-.0090
.9	39.	0.	-.4157	-.3025	-.0094	.0694	.0066	-.0085
.9	44.	0.	-.3031	-.3466	-.0071	.0633	.0073	-.0089
.9	49.	0.	-.2122	-.3892	.0112	.0554	.0072	-.0073
.9	54.	0.	-.1546	-.4110	.0001	.0621	.0054	-.0074
.9	59.	0.	-.1030	-.4330	.0055	.0741	.0067	-.0090
.9	64.	0.	-.0663	-.4517	.0154	.0843	.0070	-.0063
.9	69.	0.	-.0289	-.4674	.0157	.0886	.0051	-.0054
.9	74.	0.	.0178	-.4625	.0176	.0882	.0061	-.0070
.9	79.	0.	.0394	-.4564	.0174	.0907	.0051	-.0082
.9	-26.	-5.	-.8855	.3173	.1211	.1534	.0342	.0075
.9	-21.	-5.	-.8980	.2837	.1160	.1464	.0369	-.0021
.9	-16.	-5.	-.8876	.2420	.1164	.1312	.0392	-.0083
.9	-11.	-5.	-.8734	.2002	.1256	.1174	.0376	-.0069
.9	-6.	-5.	-.9544	.1740	.1229	.1049	.0380	-.0050
.9	-1.	-5.	-.8315	.1557	.1096	.0818	.0444	-.0122
.9	4.	-5.	-.8091	.1325	.1126	.0699	.0491	-.0146
.9	9.	-5.	-.7643	.0979	.1199	.0626	.0556	-.0139
.9	14.	-5.	-.7207	.0538	.1434	.0590	.0566	-.0122
.9	-26.	-10.	-.8876	.3056	.1993	.1691	.0504	.0175
.9	-21.	-10.	-.8848	.2831	.2045	.1536	.0531	.0107
.9	-16.	-10.	-.8790	.2421	.2126	.1368	.0593	.0030
.9	-11.	-10.	-.8720	.2104	.2092	.1205	.0591	-.0024
.9	-6.	-10.	-.8518	.1842	.1959	.1042	.0590	-.0108
.9	-1.	-10.	-.8380	.1539	.1928	.0916	.0712	-.0215
.9	4.	-10.	-.8039	.1216	.2162	.0771	.0748	-.0224
.9	9.	-10.	-.7614	.0780	.2312	.0742	.0824	-.0257
.9	14.	-10.	-.7321	.0440	.2343	.0663	.0803	-.0240
.9	-26.	-15.	-.8783	.2763	.2640	.1838	.0551	.0340
.9	-21.	-15.	-.8818	.2569	.2803	.1721	.0637	.0272
.9	-16.	-15.	-.8652	.2379	.3021	.1429	.0763	.0167
.9	-11.	-15.	-.8614	.2209	.2978	.1249	.0788	.0019
.9	-6.	-15.	-.8428	.1895	.2933	.1085	.0855	-.0088
.9	-1.	-15.	-.8333	.1570	.2866	.1005	.0915	-.0194
.9	4.	-15.	-.7954	.1134	.3075	.0884	.0905	-.0237
.9	9.	-15.	-.7571	.0667	.3270	.0820	.1006	-.0226
.9	14.	-15.	-.7049	.0269	.3307	.0746	.0969	-.0221

FULL SCALE F-101 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	-26.	-25.	-.8976	.2055	.3139	.1944	.0637	.0490
.6	-21.	-25.	-.8708	.2293	.3963	.1970	.0725	.0460
.6	-16.	-25.	-.8765	.2094	.3827	.1673	.0863	.0401
.6	-11.	-25.	-.8493	.2113	.3731	.1323	.0901	.0184
.6	-6.	-25.	-.8478	.1852	.3315	.1191	.0957	.0034
.6	-1.	-25.	-.8286	.1555	.3934	.1112	.1062	-.0028
.6	4.	-25.	-.7851	.1123	.4206	.0960	.1048	-.0096
.6	9.	-25.	-.7549	.0607	.4138	.0895	.1115	-.0153
.6	14.	-25.	-.6943	.0198	.4073	.0853	.1062	-.0158
.6	-26.	-25.	-.8902	.2728	.4112	.2001	.0774	.0723
.6	-21.	-25.	-.8675	.2261	.4284	.1877	.0788	.0591
.6	-16.	-25.	-.8649	.2354	.4262	.1726	.0915	.0437
.6	-11.	-25.	-.8432	.1965	.4548	.1495	.0986	.0348
.6	-6.	-25.	-.8175	.1666	.4547	.1334	.1017	.0201
.6	-1.	-25.	-.8210	.1541	.4656	.1155	.1109	.0152
.6	4.	-25.	-.7856	.1122	.4878	.1048	.1082	.0094
.6	9.	-25.	-.7507	.0665	.4713	.0987	.1169	-.0069
.6	14.	-25.	-.7133	.0163	.4656	.0924	.1162	-.0110
.6	-26.	-30.	-.8693	.2313	.5239	.1818	.0945	.0931
.6	-21.	-30.	-.8562	.2566	.5176	.1745	.0949	.0772
.6	-16.	-30.	-.8453	.2274	.5107	.1535	.1065	.0570
.6	-11.	-30.	-.8230	.2097	.5436	.1419	.1094	.0516
.6	-6.	-30.	-.8067	.1763	.5407	.1343	.1112	.0411
.6	-1.	-30.	-.7842	.1419	.5333	.1174	.1206	.0281
.6	4.	-30.	-.7619	.1046	.5680	.1089	.1225	.0217
.6	9.	-30.	-.7360	.0605	.5559	.1039	.1291	.0085
.6	14.	-30.	-.6926	.0182	.5780	.0973	.1315	.0021
.6	-26.	-35.	-.7965	.2783	.6193	.1606	.1059	.1094
.6	-21.	-35.	-.8023	.2463	.6264	.1563	.1127	.0946
.6	-16.	-35.	-.7981	.2373	.6310	.1406	.1217	.0805
.6	-11.	-35.	-.7903	.2152	.6583	.1316	.1254	.0740
.6	-6.	-35.	-.7679	.1732	.6331	.1230	.1220	.0605
.6	-1.	-35.	-.7636	.1403	.6301	.1143	.1306	.0438
.6	4.	-35.	-.7344	.1014	.6345	.1086	.1307	.0343
.6	9.	-35.	-.7033	.0562	.6360	.1049	.1368	.0238
.6	14.	-35.	-.6632	.0152	.6627	.0974	.1423	.0177
.6	-26.	-40.	-.7325	.2809	.7424	.1411	.1247	.1282
.6	-21.	-40.	-.7380	.2563	.7471	.1323	.1294	.1154
.6	-16.	-40.	-.7465	.2395	.7446	.1275	.1330	.1049
.6	-11.	-40.	-.7386	.2001	.7427	.1229	.1318	.0960
.6	-6.	-40.	-.7254	.1610	.7141	.1172	.1305	.0800
.6	-1.	-40.	-.7273	.1290	.7158	.1137	.1410	.0616
.6	4.	-40.	-.7112	.1028	.7376	.1102	.1465	.0526
.6	9.	-40.	-.6736	.0556	.7258	.1055	.1473	.0399
.6	14.	-40.	-.6340	.0061	.7349	.0990	.1483	.0338
.6	-11.	-45.	-.6786	.1906	.8257	.1121	.1440	.1135
.6	-6.	-45.	-.6756	.1505	.8155	.1123	.1468	.0989

FULL SCALE F-101 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.8	-26.	-5.	-.9626	.3333	.1258	.1670	.0375	.0077
.8	-21.	-5.	-.9650	.2945	.1220	.1542	.0391	.0009
.8	-16.	-5.	-.9049	.2524	.1225	.1406	.0406	-.0049
.8	-11.	-5.	-.8435	.2214	.1296	.1231	.0405	-.0029
.8	-6.	-5.	-.8221	.1913	.1222	.1025	.0404	-.0047
.8	-1.	-5.	-.8076	.1695	.1233	.0849	.0479	-.0088
.8	4.	-5.	-.8858	.1389	.1309	.4854	.0522	-.0085
.8	9.	-5.	-.8462	.0953	.1403	.0783	.0595	-.0095
.8	14.	-5.	-.7968	.0559	.1481	.0761	.0558	-.0078
.8	-26.	-10.	-.9544	.3171	.2118	.1794	.0525	.0223
.8	-21.	-10.	-.9526	.2853	.2187	.1592	.0556	.0154
.8	-16.	-10.	-.9549	.2493	.2246	.1432	.0624	.0061
.8	-11.	-10.	-.9422	.2194	.2186	.1262	.0611	-.0008
.8	-6.	-10.	-.9199	.1929	.2157	.1100	.0631	-.0056
.8	-1.	-10.	-.8052	.1660	.2057	.0925	.0723	-.0142
.8	4.	-10.	-.8840	.1393	.2208	.0818	.0744	-.0167
.8	9.	-10.	-.8340	.0864	.2449	.0824	.0831	-.0166
.8	14.	-10.	-.7871	.0463	.2587	.0798	.0800	-.0115
.8	-26.	-15.	-.9531	.2860	.2876	.1995	.0592	.0437
.8	-21.	-15.	-.9416	.2713	.2942	.1712	.0665	.0307
.8	-16.	-15.	-.9341	.2490	.3082	.1507	.0754	.0187
.8	-11.	-15.	-.9257	.2230	.3061	.1316	.0778	.0094
.8	-6.	-15.	-.8943	.1930	.2991	.1128	.0843	-.0015
.8	-1.	-15.	-.8887	.1554	.2976	.1028	.0906	-.0116
.8	4.	-15.	-.8545	.1121	.3256	.0940	.0925	-.0152
.8	9.	-15.	-.8142	.0735	.3290	.0905	.0989	-.0197
.8	14.	-15.	-.7653	.0271	.3400	.0876	.0929	-.0142

FULL SCALE F-101 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.8	-26.	-21.	-.4726	.2336	.3334	.2102	.0667	.0556
.8	-21.	-21.	-.4245	.2324	.3844	.1945	.1753	.0569
.8	-16.	-21.	-.4043	.2101	.3909	.1633	.0943	.0331
.8	-11.	-21.	-.4037	.2171	.3951	.1419	.0857	.0275
.8	-6.	-21.	-.4103	.1858	.4016	.1259	.0858	.0174
.8	-1.	-21.	-.4704	.1483	.4302	.1154	.1046	.0046
.8	4.	-21.	-.4837	.1145	.4214	.1013	.1067	-.0029
.8	9.	-21.	-.5003	.0958	.4154	.0952	.1082	-.0096
.8	14.	-21.	-.5265	.0837	.4133	.0933	.1052	-.0083
.8	-26.	-26.	-.4472	.2842	.4243	.2017	.0816	.0785
.8	-21.	-26.	-.4314	.2464	.4475	.1953	.0841	.0661
.8	-16.	-26.	-.4215	.2143	.4514	.1735	.0957	.0545
.8	-11.	-26.	-.4033	.2124	.4545	.1539	.1002	.0383
.8	-6.	-26.	-.3754	.1743	.4748	.1395	.1004	.0307
.8	-1.	-26.	-.3550	.1484	.4820	.1136	.1138	.0224
.8	4.	-26.	-.4353	.1385	.4928	.1150	.1110	.0142
.8	9.	-26.	-.4837	.1044	.4747	.1034	.1178	-.0018
.8	14.	-26.	-.5207	.0852	.4704	.0951	.1107	-.0035
.8	-26.	-31.	-.3023	.3026	.5436	.1814	.0959	.1014
.8	-21.	-31.	-.3067	.2711	.5545	.1757	.1015	.0897
.8	-16.	-31.	-.3043	.2411	.5445	.1660	.1042	.0712
.8	-11.	-31.	-.3745	.2131	.5591	.1491	.1114	.0604
.8	-6.	-31.	-.3456	.1753	.5613	.1346	.1144	.0439
.8	-1.	-31.	-.3514	.1348	.5475	.1251	.1221	.0349
.8	4.	-30.	-.3046	.1021	.5780	.1143	.1259	.0274
.8	9.	-30.	-.7780	.0615	.5622	.1076	.1315	.0126
.8	14.	-30.	-.7253	.0130	.5801	.1009	.1316	.0073
.8	-26.	-35.	-.8317	.2973	.6586	.1578	.1093	.1207
.8	-21.	-35.	-.8387	.2657	.6718	.1550	.1147	.1080
.8	-16.	-35.	-.8440	.2400	.6592	.1458	.1224	.0927
.8	-11.	-35.	-.8245	.2143	.6696	.1379	.1267	.0801
.8	-6.	-35.	-.8151	.1750	.6596	.1332	.1278	.0662
.8	-1.	-35.	-.7991	.1358	.6405	.1213	.1348	.0484
.8	4.	-35.	-.7650	.0939	.6577	.1127	.1358	.0411
.8	9.	-35.	-.7409	.0513	.6502	.1087	.1421	.0287
.8	14.	-35.	-.6947	.0059	.6675	.1022	.1440	.0228
.8	-26.	-40.	-.7489	.2818	.7750	.1398	.1258	.1409
.8	-21.	-40.	-.7672	.2584	.7738	.1347	.1310	.1266
.8	-16.	-40.	-.7763	.2391	.7660	.1283	.1338	.1132
.8	-11.	-40.	-.7783	.2103	.7648	.1291	.1357	.1014
.8	-6.	-40.	-.7666	.1659	.7426	.1245	.1379	.0857
.8	-1.	-40.	-.7560	.1277	.7283	.1177	.1446	.0674
.8	4.	-40.	-.7310	.0906	.7434	.1121	.1486	.0565
.8	9.	-40.	-.7031	.0434	.7387	.1101	.1501	.0445
.8	14.	-40.	-.6586	-.0047	.7417	.1042	.1489	.0389
.8	-11.	-45.	-.7135	.1915	.8471	.1173	.1472	.1210
.8	-6.	-45.	-.7042	.1515	.8269	.1171	.1491	.1047

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	-3.	-3.	-.3382	.3564	.0022	.0512	.0015	.0028
.6	-2.	-3.	-.3404	.2757	-.0237	.0540	-.0019	-.0028
.6	1.	-3.	-.3241	.1965	-.0240	.0573	-.0033	-.0012
.6	1.	-3.	-.7530	.0962	-.0421	.0627	-.0066	-.0027
.6	2.	-3.	-.6837	.0174	-.0257	.0630	-.0062	.0039
.6	2.	-2.	-.2984	-.0798	-.0270	.0584	-.0055	-.0014
.6	3.	-2.	-.5043	-.1761	-.0051	.0644	-.0055	.0091
.6	3.	-2.	-.4179	-.2657	-.0035	.0607	-.0069	.0110
.6	4.	-2.	-.3222	-.3282	-.0139	.0801	-.0078	.0060
.6	4.	-1.	-.2371	-.4064	-.0187	.0855	-.0060	-.0013
.6	5.	-1.	-.2377	-.4964	-.0173	.0843	-.0062	-.0016
.6	5.	-1.	-.1552	-.4921	-.0265	.1031	-.0035	-.0033
.6	6.	-0.	-.1237	-.5125	-.0181	.1150	-.0072	-.0066
.6	6.	-0.	-.0833	-.5114	-.0125	.1217	-.0071	-.0079
.6	7.	-0.	-.0655	-.5222	-.0174	.1295	-.0068	-.0122
.6	7.	-0.	.0024	-.5305	-.0112	.1243	-.0067	-.0122
.6	8.	-0.	.1007	-.5240	-.0237	.1349	-.0114	-.0116
.6	8.	-0.	.1403	-.5546	-.0219	.1419	-.0041	.0002
.6	9.	-0.	.1671	-.5679	-.0176	.1384	-.0043	.0001
.6	9.	-0.	.1933	-.5774	-.0238	.1249	-.0140	.0025
.6	10.	-0.	.2142	-.5922	-.1655	.1135	-.0311	.0001
.6	10.	-0.	.2645	-.5912	-.0214	.1165	-.0110	.0031
.6	11.	-0.	.3225	-.6134	.0773	.1555	.0120	.0108
.6	11.	-0.	.3332	-.6194	.0344	.0943	.0378	-.0018
.6	12.	-0.	.5277	-.6343	-.0362	.0437	-.0013	-.0034
.6	12.	-0.	.6719	-.6791	-.0373	.0230	.0052	-.0083
.6	13.	-0.	.6118	-.6523	-.0003	.0086	-.0030	-.0027
.6	13.	-0.	.6002	-.6395	-.0398	-.0141	-.0030	-.0011
.6	14.	-0.	.7233	-.6023	-.0451	-.0430	-.0005	-.0006
.6	14.	-0.	.7773	-.5719	-.0630	-.0732	-.0054	-.0130
.6	15.	-0.	.8033	-.5175	-.0046	-.0969	.0012	-.0006
.6	15.	-0.	.8149	-.4493	-.0318	-.1140	.0019	.0004
.6	16.	-0.	.8130	-.3727	-.0063	-.1370	.0035	.0011
.6	16.	-0.	.7944	-.2963	-.0059	-.1523	.0046	-.0030
.6	17.	-0.	.7933	-.2153	-.0230	-.1723	.0048	-.0033
.6	17.	-0.	.7949	-.1329	-.0150	-.1874	.0067	-.0058

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	180.	-0.	.7108	-.0558	-.0309	-.2143	.0084	-.0139
.6	185.	-0.	.6477	-.0025	-.0231	-.2276	.0087	-.0134
.6	190.	-0.	.5892	.0259	-.0239	-.2429	.0106	-.0213
.6	195.	-0.	.5673	.0059	-.0152	-.2618	.0118	-.0156
.6	200.	-0.	.5480	-.0016	-.0123	-.2718	.0153	-.0140
.6	205.	-0.	.5529	-.0227	-.0048	-.2804	.0106	-.0093
.6	210.	-0.	.5291	-.0103	-.0218	-.2782	.0120	-.0086
.6	215.	-0.	.4870	.0171	.0230	-.2662	.0095	.0142
.6	220.	-0.	.4330	.0584	.0308	-.2521	.0106	.0192
.6	225.	-0.	.4258	.0969	.0187	-.2654	.0088	.0129
.6	230.	-0.	.3719	.1615	.0087	-.2482	.0090	.0086
.6	235.	-0.	.3046	.2069	.0064	-.2133	.0142	.0065
.6	240.	-0.	.2495	.2462	-.0086	-.1832	.0139	-.0061
.6	245.	-0.	.2908	.2824	-.0112	-.1684	-.0019	-.0101
.6	250.	-0.	.2178	.3035	-.0004	-.1237	-.0041	.0027
.6	255.	-0.	.1350	.2303	.0042	-.0801	-.0033	.0039
.6	260.	-0.	.0354	.3074	-.0116	-.0455	-.0031	-.0061
.6	265.	-0.	-.0935	.3766	-.0114	-.0097	-.0014	-.0070
.6	270.	-0.	-.1832	.3943	-.0115	.0345	-.0013	-.0019
.6	275.	-0.	-.2618	.4277	-.0110	.0716	-.0023	-.0021
.6	280.	-0.	-.3514	.4526	.0015	.1034	-.0004	.0005
.6	285.	-0.	-.4425	.4557	-.0040	.1411	-.0037	.0026
.6	290.	-0.	-.5094	.4652	-.0124	.1713	-.0034	.0028
.6	295.	-0.	-.5632	.4659	.0053	.1851	-.0004	.0039
.6	300.	-0.	-.6224	.4720	-.0034	.1868	.0008	-.0006
.6	305.	-0.	-.6756	.4648	-.0078	.1916	.0005	-.0017
.6	310.	-0.	-.7083	.4031	-.0134	.1836	.0006	-.0018
.6	315.	-0.	-.7446	.4585	-.0243	.1777	-.0000	-.0037
.6	320.	-0.	-.7912	.4391	-.0158	.1743	.0017	-.0057
.6	325.	-0.	-.8312	.4289	.0128	.1642	.0002	.0102
.6	330.	-0.	-.8509	.4111	-.0015	.1486	.0037	.0005
.6	335.	-0.	-.8596	.3981	-.0005	.1282	.0036	-.0012
.6	340.	-0.	-.8637	.3671	-.0031	.1169	.0024	-.0007
.6	345.	-0.	-.8528	.3567	-.0043	.0913	-.0021	-.0003
.6	350.	-0.	-.8573	.3276	.1104	.0775	.0105	.0249
.6	355.	-0.	-.8548	.3039	.0275	.0567	.0026	.0090

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.5	[illegible]	-5.	-.3344	.3525	.3447	.0425	.0135	.0042
.5	[illegible]	-5.	-.3455	.2769	.0735	.0433	.0162	.0034
.5	1[illegible].	-5.	-.3557	.1954	.0489	.0539	.0150	.0078
.5	1[illegible].	-5.	-.7771	.1182	.0753	.0530	.0174	.0088
.5	2[illegible].	-5.	-.7375	.0531	.0731	.0605	.0154	.0100
.5	2[illegible].	-5.	-.5240	-.0545	.1753	.0535	.0129	.0110
.5	[illegible]	-5.	-.5457	-.1551	.0355	.0619	.0134	.0140
.5	[illegible]	-5.	-.4551	-.2425	.0365	.0773	.0127	.0135
.5	4[illegible].	-5.	[illegible]	-.3[illegible]	.0554	.0914	.0123	.0170
.5	4[illegible].	-5.	-.3422	-.3793	.0355	.1000	.0122	.0111
.5	[illegible]	-5.	-.2353	-.4555	.0215	.1041	.0031	.0209
.5	[illegible]	-5.	-.2035	-.4715	-.0010	.1004	.0005	.0179
.5	[illegible]	-5.	-.1715	-.4860	-.0252	.1155	-.0040	.0197
.5	[illegible]	-5.	-.1414	-.4950	-.0244	.1239	-.0034	.0220
.5	7[illegible].	-5.	-.0442	-.5201	-.0472	.1230	-.0113	.0346
.5	7[illegible].	-5.	[illegible]	-.5255	-.0580	.1255	-.0133	.0310
.5	8[illegible].	-5.	-.0547	-.5161	-.0744	.1375	-.0135	.0224
.5	[illegible]	-5.	.0348	-.5155	-.1011	.1433	-.0201	.0170
.5	[illegible]	-5.	.0174	-.5153	-.1221	.1362	-.0234	.0218
.5	[illegible]	-5.	.0514	-.5455	-.1761	.1245	-.0330	.0101
.5	1[illegible].	-5.	.0333	-.5257	.0356	.1135	.0045	.0077
.5	1[illegible].	-5.	.1292	-.5427	.0234	.1150	.0053	.0085
.5	11[illegible].	-5.	.2270	-.5511	-.1211	.1085	-.0209	.0057
.5	11[illegible].	-5.	.2344	-.5541	-.1741	.0935	-.0213	-.0045
.5	12[illegible].	-5.	.4307	-.5548	-.0235	.0502	.0038	-.0163
.5	12[illegible].	-5.	.5425	-.6017	.0215	.0283	.0050	-.0044
.5	13[illegible].	-5.	.6057	-.6634	-.1135	.0042	.0033	-.0211
.5	13[illegible].	-5.	[illegible]	-.6467	-.0515	-.0150	.0044	-.0338
.5	14[illegible].	-5.	.7243	-.6155	-.0221	-.0454	.0077	-.0353
.5	14[illegible].	-5.	.7559	-.5743	-.0273	-.0702	.0049	-.0356
.5	1[illegible].	-5.	.7753	-.5124	-.0231	-.0874	.0048	-.0344
.5	1[illegible].	-5.	.7439	-.4475	-.0277	-.1072	.0050	-.0346
.5	1[illegible].	-5.	.8032	-.3335	-.0193	-.1316	.0078	-.0295
.5	1[illegible].	-5.	.7430	-.3079	-.0217	-.1442	.0092	-.0241
.5	17[illegible].	-5.	.7704	-.2142	-.0140	-.1055	.0124	-.0292
.5	17[illegible].	-5.	.7435	-.1342	-.0236	-.1533	.0111	-.0331

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.5	180.	-5.	.5846	-.0538	-.0040	-.1984	.0127	-.0225
.5	185.	-5.	.5220	.0023	-.0166	-.2149	.0120	-.0333
.5	190.	-5.	.5848	.0158	-.0162	-.2400	.0132	-.0347
.5	195.	-5.	.5583	-.0102	-.0425	-.2591	.0143	-.0437
.5	200.	-5.	.5479	-.0224	-.0503	-.2702	.0204	-.0419
.5	205.	-5.	.5400	-.0272	-.0335	-.2774	.0188	-.0319
.5	210.	-5.	.5219	-.0135	.0147	-.2826	.0148	.0046
.5	215.	-5.	.4878	.0228	.0418	-.2744	.0127	.0231
.5	220.	-5.	.4442	.0577	-.0026	-.2602	.0034	.0264
.5	225.	-5.	.4223	.0922	.0733	-.2652	.0075	.0330
.5	230.	-5.	.3631	.1457	.0592	-.2453	.0104	.0267
.5	235.	-5.	.3017	.1985	.0594	-.2135	.0002	.0385
.5	240.	-5.	.3613	.2354	.1688	-.2082	-.0116	.0747
.5	245.	-5.	.2515	.2753	.1209	-.1512	-.0010	.0398
.5	250.	-5.	.2001	.3036	.0991	-.1179	.0015	.0151
.5	255.	-5.	.1162	.3229	.0957	-.0850	.0073	.0064
.5	260.	5.	.0044	.3529	.0981	-.0495	.0101	.0059
.5	265.	-5.	-.1253	.3816	.1069	-.0020	.0090	.0216
.5	270.	-5.	-.2306	.4387	.0861	.0306	.0055	.0267
.5	275.	-5.	-.3214	.4881	.0566	.0661	-.0030	.0299
.5	280.	-5.	-.4005	.5018	.0379	.1015	-.0077	.0303
.5	285.	-5.	-.4671	.4883	.0209	.1397	-.0123	.0302
.5	290.	-5.	-.5289	.4869	.0100	.1682	-.0119	.0279
.5	295.	-5.	-.5866	.4913	.0286	.1905	-.0085	.0228
.5	300.	-5.	-.6591	.4939	.0277	.1937	-.0060	.0149
.5	305.	-5.	-.7153	.4723	-.0083	.2042	-.0093	.0063
.5	310.	-5.	-.7341	.4567	-.0205	.1910	-.0076	.0029
.5	315.	-5.	-.7739	.4686	.0015	.1829	.0007	.0080
.5	320.	-5.	-.8266	.4498	.0198	.1805	.0030	.0174
.5	325.	-5.	-.8534	.4381	.0337	.1663	.0066	.0194
.5	330.	-5.	-.8609	.4184	.0448	.1487	.0103	.0147
.5	335.	-5.	-.8921	.3979	-.0044	.1406	.0065	.0009
.5	340.	-5.	-.8909	.3743	.0206	.1279	.0095	-.0045
.5	345.	-5.	-.9013	.3702	-.0229	.1048	.0043	-.0138
.5	350.	-5.	-.8900	.3430	-.0081	.0848	.0080	-.0072
.5	355.	-5.	-.8734	.2998	.0087	.0760	.0132	-.0053

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_l
.b	-5.	-10.	-1.0360	.3975	.1114	.0532	.0362	-.0020
.b	0.	-10.	-.9362	.3229	.1403	.0514	.0416	.0326
.b	10.	-10.	-.8514	.2441	.1542	.0507	.0375	.0133
.b	15.	-10.	-.8359	.1911	.1447	.0532	.0373	.0146
.b	20.	-10.	-.8171	.0644	.2054	.0652	.0343	.0204
.b	25.	-10.	-.7221	-.0325	.2112	.0736	.0389	.0199
.b	30.	-10.	-.6361	-.1346	.2212	.0774	.0413	.0201
.b	35.	-10.	-.5625	-.2245	.2124	.0958	.0369	.0213
.b	40.	-10.	-.4473	-.3139	.1417	.1101	.0279	.0249
.b	45.	-10.	-.4523	-.3629	.1235	.1196	.0298	.0242
.b	50.	-10.	-.3880	-.4151	.1177	.1329	.0247	.0358
.b	55.	-10.	-.3334	-.4543	.1784	.1376	.0152	.0455
.b	60.	-10.	-.2553	-.4774	.1764	.1324	.0158	.0431
.b	65.	-10.	-.2144	-.4716	.1247	.1313	.0115	.0333
.b	70.	-10.	-.1498	-.4424	-.0177	.1239	.0043	.0361
.b	75.	-10.	-.1032	-.5142	-.0483	.1244	-.0082	.0314
.b	80.	-10.	-.0533	-.5259	-.0578	.1337	-.0068	.0248
.b	85.	-10.	-.0263	-.5156	-.0654	.1399	-.0085	.0241
.b	90.	-10.	-.0007	-.5134	-.1014	.1240	-.0176	.0212
.b	95.	-10.	.0359	-.5316	-.1258	.1259	-.0285	.0126
.b	100.	-10.	.0361	-.5214	-.1744	.1145	-.0654	.0022
.b	105.	-10.	.1759	-.5414	-.1164	.1077	-.0116	-.0063
.b	110.	-10.	.2732	-.5767	-.1145	.0991	-.0118	-.0068
.b	115.	-10.	.3145	-.5644	-.1150	.0877	-.0091	-.0121
.b	120.	-10.	.3617	-.5557	.0743	.0514	.0107	.0111
.b	125.	-10.	.3712	-.5545	.1390	.0124	.0107	.0116
.b	130.	-10.	.3617	-.5482	.1981	-.0113	.0127	.0139
.b	135.	-10.	.3834	-.5297	.1774	-.0333	.0163	-.0146
.b	140.	-10.	.7224	-.5477	.1741	-.0581	.0193	-.0182
.b	145.	-10.	.7714	-.5404	.1644	-.0813	.0138	-.0223
.b	150.	-10.	.7443	-.4374	.1170	-.0943	.0193	-.0169
.b	155.	-10.	.7953	-.4353	.1144	-.1206	.0142	-.0185
.b	160.	-10.	.8041	-.3428	.1143	-.1347	.0209	-.0165
.b	165.	-10.	.8043	-.3035	.1361	-.1542	.0142	-.0173
.b	170.	-10.	.7883	-.2562	.1751	-.1731	.0155	-.0306
.b	175.	-10.	.7442	-.1264	.1935	-.1881	.0194	-.0396

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_l
.b	180.	-10.	.9057	-.0080	.0771	-.1972	.0239	-.0377
.b	185.	-10.	.8535	-.0155	.0670	-.2259	.0214	-.0379
.b	190.	-10.	.8238	.0033	.0750	-.2533	.0213	-.0304
.b	195.	-10.	.8036	.0053	.0663	-.2715	.0204	-.0168
.b	200.	-10.	.7827	.0020	.0754	-.2834	.0210	-.0058
.b	205.	-10.	.7632	.0249	.0985	-.3045	.0160	.0082
.b	210.	-10.	.7497	-.0061	.1136	-.2981	.0081	.0349
.b	215.	-10.	.7149	.0303	.2076	-.2948	.0120	.0768
.b	220.	-10.	.6716	.0661	.2136	-.2907	.0078	.0790
.b	225.	-10.	.6303	.1064	.2149	-.2695	.0098	.0824
.b	230.	-10.	.5772	.1604	.2105	-.2465	.0103	.0835
.b	235.	-10.	.5284	.2118	.2157	-.2031	.0111	.0807
.b	240.	-10.	.4811	.2244	.2093	-.1931	-.0059	.0930
.b	245.	-10.	.4264	.2693	.2302	-.1542	.0086	.0563
.b	250.	-10.	.3785	.3040	.2165	-.1251	.0153	.0462
.b	255.	-10.	.3426	.3465	.2254	-.0976	.0222	.0395
.b	260.	-10.	.3171	.3814	.2298	-.0625	.0252	.0435
.b	265.	-10.	.2998	.4174	.1960	-.0206	.0160	.0482
.b	270.	-10.	.2852	.4515	.1665	.0223	.0090	.0514
.b	275.	-10.	.3126	.4915	.1368	.0599	.0027	.0559
.b	280.	-10.	.4013	.5119	.1268	.0940	.0006	.0568
.b	285.	-10.	.4772	.5131	.1064	.1271	-.0028	.0547
.b	290.	-10.	.5463	.5083	.0779	.1564	-.0072	.0469
.b	295.	-10.	.6059	.5027	.0626	.1754	-.0081	.0385
.b	300.	-10.	.6738	.4930	.0445	.1894	-.0082	.0293
.b	305.	-10.	.7449	.4863	.0327	.2070	-.0055	.0154
.b	310.	-10.	.7854	.4824	.0441	.1950	.0000	.0128
.b	315.	-10.	.7934	.4629	.0689	.1852	.0058	.0204
.b	320.	-10.	.8211	.4501	.0698	.1778	.0099	.0207
.b	325.	-10.	.8012	.4429	.0870	.1688	.0123	.0259
.b	330.	-10.	.8044	.4257	.0753	.1585	.0146	.0178
.b	335.	-10.	.8020	.4047	.0705	.1431	.0184	.0112
.b	340.	-10.	.8068	.3734	.0830	.1313	.0226	.0073
.b	345.	-10.	.8292	.3655	.0244	.1129	.0166	-.0166
.b	350.	-10.	.8136	.3567	.0639	.0992	.0280	-.0127
.b	355.	-10.	.8455	.3127	.0848	.0844	.0343	-.0063

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	-5.	-15.	-1.0525	.4077	.2263	.0538	.0057	.0078
.6	0.	-15.	-1.0324	.3445	.2475	.0432	.0046	.0044
.6	10.	-15.	-.9741	.2491	.2473	.0534	.0070	.0040
.6	15.	-15.	-.9043	.1427	.3108	.0685	.0080	.0105
.6	20.	-15.	-.8327	.0445	.3071	.0774	.0057	.0042
.6	25.	-15.	-.8247	.0125	.3315	.0864	.0059	.0044
.6	30.	-15.	-.7856	-.0071	.3520	.0862	.0050	.0043
.6	35.	-15.	-.7352	-.1561	.2355	.1036	.0029	.0185
.6	40.	-15.	-.6537	-.2331	.2374	.1159	.0068	.0177
.6	45.	-15.	-.5471	-.3057	.2152	.1315	.0405	.0346
.6	50.	-15.	-.4329	-.3621	.1444	.1415	.0357	.0473
.6	55.	-15.	-.4524	-.4155	.1274	.1538	.0381	.0454
.6	60.	-15.	-.3753	-.4477	.1144	.1504	.0341	.0382
.6	65.	-15.	-.3335	-.4815	.1124	.1439	.0272	.0336
.6	70.	-15.	-.2214	-.4897	.1048	.1331	.0179	.0402
.6	75.	-15.	-.1574	-.4955	.1092	.1325	.0123	.0349
.6	80.	-15.	-.1350	-.5173	.1215	.1344	.0094	.0245
.6	85.	-15.	-.0459	-.5209	.1197	.1325	.0093	.0213
.6	90.	-15.	-.0345	-.5152	-.0224	.1321	-.0039	.0121
.6	95.	-15.	-.0377	-.5145	-.0053	.1253	-.0047	.0146
.6	100.	-15.	.0409	-.5341	-.0033	.1139	-.0001	.0003
.6	105.	-15.	.1333	-.5104	-.0147	.1036	.0029	-.0102
.6	110.	-15.	.1953	-.5017	-.0254	.0924	-.0034	-.0033
.6	115.	-15.	.2982	-.5104	-.0323	.0804	.0026	-.0105
.6	120.	-15.	.4964	-.5297	.1537	.0309	.0143	.0133
.6	125.	-15.	.5083	-.5352	.1534	.0071	.0179	.0159
.6	130.	-15.	.6243	-.5254	.1535	-.0119	.0101	-.0001
.6	135.	-15.	.6653	-.5345	.1138	-.0309	.0147	-.0130
.6	140.	-15.	.7332	-.5409	.1156	-.0549	.0178	-.0186
.6	145.	-15.	.7697	-.5427	.1127	-.0827	.0134	-.0239
.6	150.	-15.	.7875	-.5425	.1078	-.1005	.0246	-.0203
.6	155.	-15.	.8142	-.4363	.1768	-.1235	.0220	-.0222
.6	160.	-15.	.8115	-.3573	.1707	-.1341	.0221	-.0197
.6	165.	-15.	.7832	-.2771	.1585	-.1555	.0203	-.0224
.6	170.	-15.	.7753	-.1938	.1526	-.1743	.0217	-.0302
.6	175.	-15.	.7304	-.1352	.1432	-.1873	.0278	-.0134
.6	180.	-15.	.7102	-.0698	.1652	-.2046	.0277	-.0266
.6	185.	-15.	.6858	-.0302	.1593	-.2287	.0283	-.0231
.6	190.	-15.	.6703	-.0057	.0993	-.2581	.0245	-.0216
.6	195.	-15.	.6385	.0133	.1262	-.2712	.0227	-.0018
.6	200.	-15.	.6105	.0198	.1389	-.2905	.0210	.0043
.6	205.	-15.	.5972	.0101	.1753	-.3001	.0164	.0299
.6	210.	-15.	.6005	-.0056	.1952	-.3111	.0106	.0541
.6	215.	-15.	.6751	.0216	.2413	-.3065	.0129	.0780
.6	220.	-15.	.6056	.0687	.3055	-.2919	.0159	.1058
.6	225.	-15.	.4348	.1054	.3233	-.2667	.0153	.1177
.6	230.	-15.	.4045	.1472	.2947	-.2448	.0172	.1062
.6	235.	-15.	.3337	.2007	.2876	-.1985	.0184	.1007
.6	240.	-15.	.3378	.2155	.3330	-.1794	.0054	.0986
.6	245.	-15.	.2834	.2427	.3278	-.1494	.0145	.0905
.6	250.	-15.	.1744	.3058	.3209	-.1314	.0296	.0726
.6	255.	-15.	.0734	.3659	.3192	-.1061	.0323	.0706
.6	260.	-15.	-.0325	.4122	.3014	-.0711	.0273	.0724
.6	265.	-15.	-.1308	.4378	.2936	-.0281	.0233	.0767
.6	270.	-15.	-.2209	.4690	.2441	.0159	.0209	.0844
.6	275.	-15.	-.3183	.4969	.2551	.0595	.0187	.0859
.6	280.	-15	-.4034	.5121	.2270	.0922	.0143	.0844
.6	285.	-15.	-.4883	.5227	.2100	.1211	.0107	.0806
.6	290.	-15.	-.5677	.5260	.1747	.1514	.0056	.0750
.6	295.	-15.	-.6267	.5130	.1554	.1698	.0024	.0658
.6	300.	-15.	-.6800	.5019	.1384	.1794	.0020	.0557
.6	305.	-15.	-.7120	.4923	.1248	.1785	.0017	.0494
.6	310.	-15.	-.7540	.5030	.1186	.1824	.0101	.0300
.6	315.	-15.	-.7744	.4786	.1234	.1744	.0158	.0251
.6	320.	-15.	-.7821	.4450	.1237	.1657	.0227	.0198
.6	325.	-15.	-.8315	.4364	.1595	.1613	.0271	.0380
.6	330.	-15.	-.9070	.4368	.1629	.1604	.0303	.0338
.6	335.	-15.	-.8887	.4005	.1566	.1429	.0336	.0243
.6	340.	-15.	-.9272	.3943	.1601	.1343	.0361	.0196
.6	345.	-15.	-.9357	.3918	.1418	.1169	.0377	.0076
.6	350.	-15.	-.9116	.3486	.1691	.1066	.0468	.0057
.6	355.	-15.	-.8793	.3070	.1923	.0888	.0555	.0064

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	-10.	-30.	-1.0543	.4429	.5518	.0569	.1276	.0100
.6	-5.	-30.	-1.0317	.3801	.5651	.0529	.1349	.0047
.6	0.	-30.	-1.0019	.3149	.6038	.0506	.1396	.0036
.6	5.	-30.	-.9503	.2560	.6130	.0626	.1373	.0143
.6	10.	-30.	-.8923	.1981	.6271	.0673	.1325	.0187
.6	15.	-30.	-.8375	.1452	.6332	.0759	.1280	.0194
.6	20.	-30.	-.7728	-.0091	.6249	.0956	.1165	.0217
.6	25.	-30.	-.7369	-.0457	.6088	.1151	.1061	.0244
.6	30.	-30.	-.6940	-.1537	.5184	.1361	.1185	.0242
.6	35.	-30.	-.6387	-.2037	.6326	.1469	.1146	.0294
.6	40.	-30.	-.5550	-.2705	.6124	.1554	.1103	.0389
.6	45.	-30.	-.4706	-.3375	.5714	.1527	.1015	.0469
.6	50.	-30.	-.4706	-.3375	.5714	.1527	.1015	.0469
.6	60.	-30.	-.4333	-.4181	.5216	.1548	.0881	.0560
.6	65.	-30.	-.3267	-.4158	.4652	.1492	.0757	.0505
.6	65.	-30.	-.3267	-.4158	.4652	.1492	.0757	.0505
.6	70.	-30.	-.2427	-.4469	.4269	.1449	.0679	.0468
.6	75.	-30.	-.1471	-.4785	.3976	.1322	.0608	.0449
.6	80.	-30.	-.0956	-.4472	.3530	.1318	.0533	.0338
.6	85.	-30.	-.0351	-.4452	.3317	.1266	.0521	.0209
.6	90.	-30.	.0362	-.5035	.3331	.1135	.0581	.0080
.6	95.	-30.	.1271	-.5168	.3567	.1072	.0629	.0011
.6	100.	-30.	.1420	-.5083	.3489	.0945	.0610	-.0035
.6	105.	-30.	.1249	-.5064	.3379	.0910	.0512	.0009
.6	110.	-30.	.2372	-.5042	.3512	.0649	.0536	-.0098
.6	115.	-30.	.3088	-.4943	.3823	.0536	.0553	-.0060
.6	120.	-30.	.5369	-.5285	.4776	.0033	.0524	.0278
.6	125.	-30.	.5333	-.6067	.4771	-.0240	.0541	.0210
.6	130.	-30.	.6350	-.5758	.4641	-.0371	.0481	.0255
.6	135.	-30.	.6845	-.5462	.4611	-.0610	.0417	.0265
.6	140.	-30.	.7143	-.5157	.4689	-.0837	.0484	.0238
.6	145.	-30.	.7551	-.4817	.4843	-.1093	.0477	.0195
.6	150.	-30.	.7743	-.4375	.5053	-.1273	.0445	.0224
.6	155.	-30.	.7959	-.3742	.5215	-.1414	.0444	.0222
.6	160.	-30.	.8033	-.3238	.5252	-.1742	.0437	.0230
.6	165.	-30.	.7927	-.2491	.5159	-.1848	.0426	.0210
.6	170.	-30.	.7951	-.1772	.4970	-.1981	.0401	.0201
.6	175.	-30.	.7972	-.1208	.4958	-.2117	.0351	.0303

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	180.	-30.	.7998	-.0976	.4823	-.2428	.0295	.0431
.6	185.	-30.	.7847	-.0554	.4711	-.2620	.0249	.0586
.6	190.	-30.	.7676	-.0227	.4672	-.2856	.0220	.0565
.6	195.	-30.	.7625	.0016	.4548	-.3060	.0194	.0597
.6	200.	-30.	.7520	.0213	.4583	-.3144	.0189	.0769
.6	205.	-30.	.7579	.0107	.4762	-.3113	.0191	.1025
.6	210.	-30.	.7281	.0229	.4911	-.3269	.0172	.1198
.6	215.	-30.	.7153	.0428	.5086	-.3407	.0184	.1363
.6	220.	-30.	.6783	.0619	.5349	-.3318	.0187	.1605
.6	225.	-30.	.6889	.1083	.5442	-.3133	.0197	.1736
.6	230.	-30.	.6275	.1397	.5769	-.2851	.0168	.1896
.6	235.	-30.	.6582	.1760	.5998	-.2539	.0133	.1964
.6	235.	-30.	.6582	.1760	.5998	-.2539	.0133	.1964
.6	240.	-30.	.6582	.1660	.5905	-.2144	.0112	.1698
.6	245.	-30.	.6607	.2201	.6148	-.1803	.0150	.1823
.6	245.	-30.	.6637	.2201	.6148	-.1803	.0350	.1823
.6	250.	-30.	.2589	.2735	.5836	-.1374	.0328	.1798
.6	255.	-30.	.1457	.3480	.5772	-.1049	.0355	.1796
.6	260.	-30.	.0209	.4085	.5852	-.0724	.0420	.1809
.6	265.	-30.	-.0871	.4457	.5714	-.0410	.0435	.1808
.6	270.	-30.	-.2089	.4746	.5643	-.0002	.0471	.1842
.6	275.	-30.	-.2839	.4836	.5494	.0298	.0475	.1825
.6	280.	-30.	-.3581	.5006	.5371	.0565	.0475	.1820
.6	285.	-30.	-.4222	.5052	.5401	.0766	.0487	.1804
.6	290.	-30.	-.4849	.5141	.5408	.0876	.0489	.1761
.6	295.	-30.	-.5231	.5101	.5416	.0956	.0503	.1714
.6	300.	-30.	-.5773	.5054	.5434	.1149	.0524	.1665
.6	305.	-30.	-.5961	.4923	.5528	.1228	.0621	.1579
.6	310.	-30.	-.6374	.4820	.5509	.1207	.0652	.1568
.6	315.	-30.	-.6834	.4624	.5353	.1305	.0694	.1483
.6	320.	-30.	-.7367	.4389	.5224	.1391	.0747	.1262
.6	325.	-30.	-.7594	.4123	.5148	.1376	.0826	.1133
.6	330.	-30.	-.7778	.3966	.5111	.1273	.0885	.0986
.6	335.	-30.	-.7877	.3838	.5308	.1038	.0986	.0847
.6	340.	-30.	-.7811	.3738	.5066	.0938	.0994	.0667
.6	345.	-30.	-.7814	.3594	.5049	.0903	.1039	.0537
.6	350.	-30.	-.7763	.3390	.5120	.0832	.1122	.0387
.6	355.	-30.	-.7557	.2973	.5224	.0868	.1234	.0313

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.2	-3.	-45.	-.7807	.3723	.3179	.0324	.1708	.1036
.2	0.	-45.	-.7420	.3591	.3443	.0273	.1786	.1016
.2	11.	-45.	-.7052	.3437	.3601	.0129	.1833	.0988
.2	15.	-45.	-.7443	.2582	.3390	.0335	.1756	.0820
.2	20.	-45.	-.6819	.1829	.3214	.0473	.1707	.0707
.6	25.	-45.	-.7147	.1419	.3053	.0013	.1693	.0634
.2	30.	-45.	-.6486	.0593	.3060	.0724	.1614	.0571
.2	35.	-45.	-.5974	-.0307	.3342	.0895	.1513	.0500
.6	40.	-45.	-.5776	-.0791	.3400	.1053	.1438	.0522
.2	45.	-45.	-.5076	-.1394	.3828	.1159	.1441	.0502
.6	50.	-45.	-.4261	-.2063	.3926	.1233	.1483	.0586
.6	55.	-45.	-.4219	-.2231	.3643	.1280	.1417	.0612
.6	60.	-45.	-.3201	-.2885	.3347	.1303	.1323	.0574
.6	65.	-45.	-.2511	-.3245	.3150	.1363	.1225	.0715
.6	70.	-45.	-.1645	-.3461	.7422	.1274	.1156	.0700
.6	75.	-45.	-.0941	-.3687	.7672	.1259	.1105	.0655
.2	80.	-45.	-.0510	-.4232	.7327	.1305	.1046	.0587
.6	85.	-45.	.0154	-.4072	.7011	.1178	.1012	.0472
.6	90.	-45.	.0618	-.4064	.6801	.1073	.0981	.0356
.6	95.	-45.	.1191	-.4068	.6926	.0967	.1137	.0272
.2	100.	-45.	.1692	-.4011	.6729	.0813	.1036	.0185
.2	105.	-45.	.2154	-.4006	.6684	.0699	.1066	.0118
.6	110.	-45.	.2496	-.4023	.6446	.0488	.1047	.0045
.6	115.	-45.	.2941	-.3782	.6473	.0319	.1035	.0040
.2	120.	-45.	.3054	-.5122	.7562	.0183	.0836	.0518
.2	125.	-45.	.4179	-.4735	.7697	-.0054	.0830	.0545
.6	130.	-45.	.4080	-.4584	.7722	-.0375	.0825	.0536
.2	135.	-45.	.5180	-.4295	.7761	-.0602	.0783	.0525
.2	140.	-45.	.5640	-.3971	.7643	-.0852	.0725	.0518
.6	145.	-45.	.5148	-.3529	.7487	-.1051	.0649	.0530
.2	150.	-45.	.6334	-.3043	.7280	-.1217	.0601	.0516
.2	155.	-45.	.6833	-.2503	.7380	-.1432	.0571	.0548
.6	160.	-45.	.6335	-.2235	.7303	-.1664	.0535	.0581
.6	165.	-45.	.6918	-.1835	.7174	-.1828	.0490	.0603
.6	170.	-45.	.7071	-.1584	.7134	-.2030	.0453	.0627
.6	175.	-45.	.6951	-.0965	.7327	-.2175	.0441	.0736

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.2	180.	-45.	.6957	-.0585	.7423	-.2369	.0410	.0816
.6	185.	-45.	.6973	-.0268	.7447	-.2571	.0404	.0873
.2	190.	-45.	.6937	-.0054	.7543	-.2706	.0398	.1004
.6	195.	-45.	.7033	-.0028	.7646	-.2760	.0400	.1169
.2	200.	-45.	.6969	.0018	.7709	-.2765	.0407	.1340
.2	205.	-45.	.6968	.0018	.7897	-.2800	.0401	.1604
.6	210.	-45.	.6851	.0069	.8019	-.2760	.0362	.1840
.2	215.	-45.	.6650	.0206	.8257	-.2718	.0371	.2025
.2	220.	-45.	.6195	.0444	.8448	-.2645	.0354	.2306
.2	225.	-45.	.5514	.0884	.8133	-.2436	.0307	.2382
.2	230.	-45.	.4883	.1129	.8276	-.2205	.0341	.2567
.2	235.	-45.	.4394	.1341	.8588	-.1944	.0441	.2750
.2	240.	-45.	.3742	.1171	.7808	-.1522	.0352	.2451
.2	245.	-45.	.2956	.1897	.8478	-.1243	.0420	.2602
.2	250.	-45.	.2195	.2133	.8044	-.0931	.0463	.2476
.6	255.	-45.	.1485	.2672	.8459	-.0658	.0554	.2561
.2	260.	-45.	.0920	.3014	.8550	-.0509	.0622	.2557
.6	265.	-45.	.0148	.3256	.8555	-.0322	.0664	.2552
.2	270.	-45.	-.0582	.3527	.8480	-.0103	.0733	.2529
.2	275.	-45.	-.1205	.3740	.8386	.0055	.0766	.2504
.2	280.	-45.	-.1783	.3917	.8571	.0205	.0816	.2569
.2	285.	-45.	-.2254	.3968	.8996	.0316	.0898	.2692
.2	290.	-45.	-.2465	.3986	.9283	.0433	.1052	.2717
.6	295.	-45.	-.3016	.3971	.9473	.0544	.1132	.2721
.2	300.	-45.	-.3713	.4042	.9386	.0639	.1175	.2609
.6	305.	-45.	-.4217	.4003	.9523	.0635	.1233	.2574
.2	310.	-45.	-.4753	.3888	.9441	.0737	.1257	.2473
.6	315.	-45.	-.5113	.3645	.9249	.0803	.1257	.2341
.6	320.	-45.	-.5561	.3585	.9252	.0851	.1295	.2242
.6	325.	-45.	-.5898	.3514	.9162	.0819	.1319	.2107
.6	330.	-45.	-.6069	.3337	.9018	.0817	.1365	.1918
.6	335.	-45.	-.6170	.3130	.9046	.0816	.1449	.1770
.2	340.	-45.	-.6420	.2744	.8814	.0846	.1500	.1545
.2	345.	-45.	-.6122	.2613	.8862	.0741	.1572	.1412
.6	350.	-45.	-.5903	.2467	.9142	.0701	.1668	.1316
.2	355.	-45.	-.5869	.2362	.9110	.0660	.1682	.1210

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-0.	-1.1259	.4144	-.0032	.0783	.0010	-.0015
.9	5.	-0.	-1.1041	.3474	-.0244	.0743	-.0024	-.0041
.9	10.	-0.	-1.0215	.2593	-.0339	.0835	-.0018	-.0050
.9	15.	-0.	-.9389	.1797	-.0282	.0952	-.0010	-.0012
.9	20.	-0.	-.8765	.0779	-.0187	.1024	.0030	.0005
.9	25.	-0.	-.8305	-.0371	-.0267	.1152	.0062	-.0045
.9	30.	-0.	-.7113	-.1497	-.0377	.1259	-.0022	-.0137
.9	35.	-0.	-.6123	-.2511	-.0229	.1312	-.0025	.0015
.9	40.	-0.	-.4868	-.3492	-.0123	.1272	-.0030	.0024
.9	45.	-0.	-.3756	-.4476	-.0234	.1249	-.0065	-.0035
.9	50.	-0.	-.2852	-.5259	-.0156	.1238	-.0019	-.0065
.9	55.	-0.	-.2028	-.5916	-.0220	.1233	-.0046	-.0038
.9	60.	-0.	-.1534	-.6754	-.0070	.1256	-.0018	-.0023
.9	65.	-0.	-.1076	-.6035	-.0117	.1315	-.0028	-.0025
.9	70.	-0.	-.0713	-.6284	-.0048	.1329	-.0010	-.0050
.9	75.	-0.	-.0127	-.6619	.0264	.1252	.0026	-.0040
.9	80.	-0.	.0532	-.6825	-.0077	.1343	-.0048	-.0007
.9	85.	-0.	.0871	-.5982	-.0046	.1470	-.0010	-.0023
.9	90.	-0.	.0814	-.6015	.0115	.1505	.0065	-.0014
.9	95.	-0.	.1054	-.6092	-.0472	.1458	-.0075	-.0049
.9	100.	-0.	.1583	-.6128	-.0100	.1389	-.0036	-.0011
.9	105.	-0.	.2197	-.6361	-.0176	.1364	-.0172	-.0040
.9	110.	-0.	.2918	-.6453	-.0254	.1259	-.0102	-.0075
.9	115.	-0.	.3329	-.6655	-.0445	.1061	-.0053	-.0097
.9	120.	-0.	.3530	-.7541	-.0511	.0622	-.0064	-.0061
.9	125.	-0.	.3073	-.7419	-.0498	.0359	-.0015	-.0144
.9	130.	-0.	.3714	-.7255	-.0430	.0131	-.0003	-.0112
.9	135.	-0.	.7479	-.7164	-.0537	-.0109	-.0013	-.0107
.9	140.	-0.	.8043	-.6727	-.0550	-.0492	-.0006	-.0126
.9	145.	-0.	.8639	-.6234	-.0411	-.0749	-.0014	-.0110
.9	150.	-0.	.9417	-.5524	-.0369	-.1032	.0007	-.0121
.9	155.	-0.	.9181	-.4366	-.0350	-.1211	.0014	-.0134
.9	160.	-0.	.9173	-.4061	-.0319	-.1406	.0022	-.0130
.9	165.	-0.	.9139	-.3168	-.0336	-.1631	.0022	-.0131
.9	170.	-0.	.9302	-.2143	-.0352	-.1830	.0020	-.0131
.9	175.	-0.	.9744	-.1142	-.0330	-.2152	.0038	-.0149
.9	180.	-0.	.8007	-.0350	-.0433	-.2453	.0038	-.0191
.9	185.	-0.	.7330	.0410	-.0539	-.2690	.0037	-.0229
.9	190.	-0.	.6561	.0755	-.0424	-.2847	.0069	-.0299
.9	195.	-0.	.6340	.0437	-.0351	-.2983	.0095	-.0288
.9	200.	-0.	.5418	-.0130	-.0445	-.3002	.0061	-.0286
.9	205.	-0.	.5248	-.0009	-.0403	-.3039	.0064	-.0270
.9	210.	-0.	.5025	.0187	-.0404	-.3049	.0073	-.0277
.9	215.	-0.	.5777	.0463	-.0395	-.3030	.0046	-.0135
.9	220.	-0.	.5330	.0878	-.0168	-.2945	.0044	.0014
.9	225.	-0.	.4683	.1294	-.0212	-.2726	.0033	.0032
.9	230.	-0.	.4179	.1606	-.0173	-.2633	.0049	-.0028
.9	235.	-0.	.3317	.2037	-.0304	-.2213	.0043	-.0060
.9	240.	-0.	.3876	.2286	-.0365	-.2113	-.0026	-.0152
.9	245.	-0.	.3070	.2821	-.0256	-.1752	-.0003	-.0188
.9	250.	-0.	.2280	.3073	-.0431	-.1294	-.0044	-.0146
.9	255.	-0.	.1455	.2907	-.0377	-.0759	-.0045	-.0121
.9	260.	-0.	.0439	.3126	-.0523	-.0364	-.0032	-.0246
.9	265.	-0.	-.0697	.3818	-.0615	-.0126	-.0039	-.0199
.9	270.	-0.	-.2127	.4401	-.0531	.0306	-.0013	-.0111
.9	275.	-0.	-.3147	.4812	-.0469	.0753	-.0022	-.0091
.9	280.	-0.	-.4185	.5109	-.0374	.1107	-.0005	-.0169
.9	285.	-0.	-.5120	.5271	-.0313	.1485	-.0002	-.0149
.9	290.	-0.	-.5799	.5264	-.0549	.1843	-.0009	-.0126
.9	295.	-0.	-.6539	.5408	-.0295	.2130	.0003	-.0167
.9	300.	-0.	-.7194	.5578	-.0429	.2121	-.0017	-.0170
.9	305.	-0.	-.7690	.5697	-.0605	.2047	-.0029	-.0184
.9	310.	-0.	-.8232	.5651	-.0591	.1993	-.0012	-.0178
.9	315.	-0.	-.8562	.5592	-.0517	.1897	.0013	-.0158
.9	320.	-0.	-.9215	.5503	-.0515	.1895	.0011	-.0168
.9	325.	-0.	-.9665	.5184	-.0550	.1825	.0004	-.0172
.9	330.	-0.	-.9935	.4855	-.0530	.1704	.0008	-.0202
.9	335.	-0.	-1.0047	.4571	-.0578	.1525	-.0007	-.0219
.9	340.	-0.	-1.0230	.4209	-.0587	.1473	-.0005	-.0189
.9	345.	-0.	-.9990	.3751	-.0448	.1336	-.0003	-.0169
.9	350.	-0.	-1.0000	.3456	-.0552	.1228	-.0014	-.0163
.9	355.	-0.	-.9630	.3228	-.0334	.0874	.0012	-.0125

HALF SCALE F-104 EJECTION SEAT AERODYNAMIC COEFFICIENTS

HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-5.	-1.1511	.4273	.0376	.0867	.0237	.0055
.9	5.	-5.	-1.1018	.3435	.0424	.0869	.0224	.0039
.9	10.	-5.	-1.0517	.2643	.0525	.0900	.0229	.0045
.9	15.	-5.	-.9874	.1895	.0313	.0976	.0240	-.0005
.9	20.	-5.	-.8985	.1251	.0113	.1044	.0234	.0007
.9	25.	-5.	-.8208	-.0275	.1086	.1117	.0209	.0078
.9	30.	-5.	-.7547	-.1271	.0971	.1219	.0166	.0098
.9	35.	-5.	-.6470	-.2275	.0959	.1310	.0136	.0116
.9	40.	-5.	-.5659	-.3362	.0924	.1507	.0144	.0177
.9	45.	-5.	-.4541	-.4163	.0925	.1389	.0105	.0163
.9	50.	-5.	-.3652	-.4945	.0297	.1426	.0088	.0151
.9	55.	-5.	-.2714	-.5329	.0139	.1383	.0077	.0121
.9	60.	-5.	-.2200	-.5653	-.0028	.1352	.0041	.0125
.9	65.	-5.	-.1300	-.5824	-.0068	.1319	.0040	.0124
.9	70.	-5.	-.1255	-.5986	-.0169	.1308	.0015	.0125
.9	75.	-5.	-.0720	-.5935	-.0774	.1309	-.0079	.0125
.9	80.	-5.	-.0136	-.5895	-.0842	.1409	-.0054	.0039
.9	85.	-5.	.0281	-.5836	-.0845	.1515	-.0096	.0005
.9	90.	-5.	.0408	-.5307	-.1053	.1497	-.0122	-.0061
.9	95.	-5.	.0677	-.5000	-.1138	.1490	-.0150	-.0051
.9	100.	-5.	.1103	-.5953	-.0797	.1466	-.0120	-.0016
.9	105.	-5.	.1455	-.5962	.0616	.1433	.0122	.0045
.9	110.	-5.	.2604	-.5805	-.1100	.1319	-.0108	.0027
.9	115.	-5.	.3475	-.5445	-.0832	.1137	-.0110	.0048
.9	120.	-5.	.5423	-.7468	.0324	.0510	.0028	.0048
.9	125.	-5.	.6216	-.7443	.0372	.0293	.0031	-.0017
.9	130.	-5.	.6981	-.7319	.0404	-.0015	.0082	-.0143
.9	135.	-5.	.7790	-.7199	.0551	-.0313	.0137	-.0192
.9	140.	-5.	.8323	-.6775	.0582	-.0564	.0128	-.0185
.9	145.	-5.	.8744	-.6235	.0661	-.0846	.0154	-.0206
.9	150.	-5.	.9041	-.5694	.0549	-.1066	.0168	-.0232
.9	155.	-5.	.9310	-.5045	.0671	-.1294	.0173	-.0228
.9	160.	-5.	.9400	-.4152	.0725	-.1517	.0173	-.0239
.9	165.	-5.	.9333	-.3333	.0554	-.1691	.0169	-.0274
.9	170.	-5.	.9154	-.2242	.0331	-.1866	.0148	-.0316
.9	175.	-5.	.8709	-.1283	.0209	-.2175	.0175	-.0333

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	180.	-5.	.8132	-.0463	.0131	-.2429	.0164	-.0336
.9	185.	-5.	.7485	.0122	.0231	-.2694	.0154	-.0347
.9	190.	-5.	.6915	.0551	.0103	-.2916	.0134	-.0296
.9	195.	-5.	.6718	.0108	.0006	-.3088	.0070	-.0270
.9	200.	-5.	.6686	.0026	-.0055	-.3141	.0086	-.0145
.9	205.	-5.	.6419	-.0019	.0157	-.3125	.0067	-.0044
.9	210.	-5.	.6225	.0129	.0415	-.3156	.0046	.0158
.9	215.	-5.	.5813	.0505	.0597	-.3082	.0030	.0361
.9	220.	-5.	.5198	.0873	.0742	-.2928	.0014	.0528
.9	225.	-5.	.4619	.1255	.0814	-.2713	-.0004	.0584
.9	230.	-5.	.4077	.1662	.0684	-.2506	.0003	.0476
.9	235.	-5.	.3376	.1979	.0689	-.2194	-.0026	.0416
.9	240.	-5.	.4060	.2238	.1096	-.2171	-.0091	.0422
.9	245.	-5.	.3094	.2841	.0842	-.1722	.0004	.0236
.9	250.	-5.	.2367	.3094	.0643	-.1316	.0039	.0008
.9	255.	-5.	.1392	.3295	.0683	-.0895	.0092	-.0090
.9	260.	-5.	.0538	.3662	.0477	-.0600	.0091	-.0080
.9	265.	-5.	-.1053	.4175	.0525	-.0206	.0084	-.0041
.9	270.	-5.	-.2545	.4816	.0253	.0229	.0004	.0098
.9	275.	-5.	-.3607	.5262	.0104	.0600	-.0047	.0112
.9	280.	-5.	-.4634	.5552	.0043	.1078	-.0073	.0149
.9	285.	-5.	-.5318	.5477	-.0031	.1503	-.0088	.0151
.9	290.	-5.	-.6039	.5516	.0209	.1883	-.0051	.0164
.9	295.	-5.	-.6420	.5414	.0379	.2001	.0004	.0068
.9	300.	-5.	-.7132	.5630	.0086	.2043	-.0017	-.0009
.9	305.	-5.	-.7657	.5656	-.0349	.1981	-.0085	-.0056
.9	310.	-5.	-.8153	.5629	-.0317	.1968	-.0068	-.0003
.9	315.	-5.	-.8509	.5511	-.0028	.1917	.0033	.0013
.9	320.	-5.	-.9156	.5331	.0037	.1895	.0065	.0001
.9	325.	-5.	-.9656	.5137	.0122	.1788	.0113	-.0045
.9	330.	-5.	-.9929	.4830	.0119	.1713	.0134	-.0060
.9	335.	-5.	-1.0232	.4569	-.0275	.1616	.0099	-.0148
.9	340.	-5.	-1.0177	.4195	-.0135	.1496	.0134	-.0174
.9	345.	-5.	-1.0189	.3879	-.0033	.1369	.0140	-.0153
.9	350.	-5.	-.9927	.3492	.0143	.1191	.0132	-.0096
.9	355.	-5.	-.9825	.3155	.0007	.1069	.0139	-.0119

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-10.	-1.1028	.3472	.2655	.0802	.0474	.0081
.9	5.	-10.	-1.0734	.3455	.2153	.0704	.0520	.0095
.9	10.	-10.	-1.0144	.2561	.2353	.0899	.0519	.0149
.9	15.	-10.	-.9545	.1691	.2518	.0933	.0484	.0189
.9	20.	-10.	-.8935	.0761	.2499	.1005	.0504	.0068
.9	25.	-10.	-.7934	-.0507	.2509	.1179	.0476	.0097
.9	30.	-10.	-.7243	-.1520	.2518	.1301	.0477	.0091
.9	35.	-10.	-.6508	-.2502	.2281	.1483	.0412	.0161
.9	40.	-10.	-.5573	-.3524	.1887	.1570	.0365	.0191
.9	45.	-10.	-.4704	-.4256	.1490	.1602	.0288	.0221
.9	50.	-10.	-.3804	-.4913	.1331	.1645	.0298	.0307
.9	55.	-10.	-.3323	-.5625	.0930	.1654	.0224	.0366
.9	60.	-10.	-.2133	-.5943	.0685	.1486	.0205	.0304
.9	65.	-10.	-.1438	-.5641	.0443	.1342	.0177	.0210
.9	70.	-10.	-.1104	-.5657	.0071	.1237	.0124	.0112
.9	75.	-10.	-.0405	-.6004	-.0269	.1357	.0050	.0108
.9	80.	-10.	.0122	-.6102	-.0438	.1394	.0033	.0084
.9	85.	-10.	.0501	-.6073	-.0531	.1493	.0016	.0023
.9	90.	-10.	.0734	-.6193	-.0373	.1534	.0008	.0018
.9	95.	-10.	.1313	-.6235	-.0531	.1454	-.0047	.0010
.9	100.	-10.	.1501	-.6225	-.0330	.1468	.0001	.0010
.9	105.	-10.	.2529	-.6370	-.0429	.1346	-.0052	.0050
.9	110.	-10.	.3304	-.6328	-.0334	.1219	-.0026	.0028
.9	115.	-10.	.4077	-.6449	-.0152	.1035	.0014	.0000
.9	120.	-10.	.5681	-.7464	.1162	.0372	.0166	.0051
.9	125.	-10.	.6344	-.7362	.1720	.0158	.0195	.0068
.9	130.	-10.	.7177	-.7285	.1720	-.0131	.0184	.0048
.9	135.	-10.	.7945	-.7115	.1732	-.0435	.0191	-.0030
.9	140.	-10.	.8427	-.6708	.1666	-.0712	.0220	-.0105
.9	145.	-10.	.8826	-.6199	.1764	-.0973	.0255	-.0192
.9	150.	-10.	.9045	-.5563	.1843	-.1159	.0288	-.0217
.9	155.	-10.	.9098	-.4949	.1736	-.1229	.0278	-.0219
.9	160.	-10.	.9506	-.4323	.1616	-.1574	.0270	-.0245
.9	165.	-10.	.9342	-.3366	.1459	-.1753	.0230	-.0265
.9	170.	-10.	.9090	-.2356	.1166	-.1982	.0221	-.0283
.9	175.	-10.	.8853	-.1333	.1031	-.2201	.0263	-.0399

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	180.	-10.	.8218	-.0498	.1148	-.2483	.0226	-.0272
.9	185.	-10.	.7771	.0053	.1100	-.2691	.0210	-.0244
.9	190.	-10.	.7288	.0428	.0410	-.2931	.0150	-.0185
.9	195.	-10.	.6997	.0212	.0862	-.3139	.0123	-.0018
.9	200.	-10.	.6900	.0127	.0880	-.3239	.0107	.0165
.9	205.	-10.	.6617	.0130	.1069	-.3222	.0107	.0248
.9	210.	-10.	.6251	.0389	.1109	-.3171	.0088	.0417
.9	215.	-10.	.6209	.0504	.1999	-.3253	.0018	.0805
.9	220.	-10.	.5443	.0826	.1783	-.3011	.0010	.0863
.9	225.	-10.	.4802	.1274	.1655	-.2759	.0007	.0842
.9	230.	-10.	.4158	.1640	.1419	-.2472	.0008	.0717
.9	235.	-10.	.3537	.2106	.1721	-.2214	-.0027	.0811
.9	240.	-10.	.4188	.2257	.2355	-.2166	-.0050	.0812
.9	245.	-10.	.3325	.2704	.2161	-.1731	.0138	.0565
.9	250.	-10.	.2385	.3202	.2009	-.1396	.0200	.0404
.9	255.	-10.	.1398	.3737	.1911	-.1187	.0239	.0257
.9	260.	-10.	.0041	.4223	.1751	-.0861	.0222	.0235
.9	265.	-10.	-.0988	.4590	.1524	-.0428	.0154	.0285
.9	270.	-10.	-.2178	.4911	.1231	.0078	.0048	.0393
.9	275.	-10.	-.3300	.5260	.1004	.0552	.0004	.0447
.9	280.	-10.	-.4266	.5492	.0886	.0973	-.0012	.0495
.9	285.	-10.	-.5146	.5665	.0742	.1334	-.0039	.0458
.9	290.	-10.	-.5998	.5685	.0684	.1745	-.0073	.0354
.9	295.	-10.	-.6555	.5585	.0446	.1691	-.0065	.0266
.9	300.	-10.	-.7409	.5828	.0180	.1957	-.0073	.0178
.9	305.	-10.	-.7805	.5721	.0184	.1915	-.0069	.0168
.9	310.	-10.	-.8320	.5727	.0377	.1939	-.0000	.0134
.9	315.	-10.	-.8357	.5392	.0446	.1874	.0118	.0109
.9	320.	-10.	-.911	.5295	.0830	.1868	.0178	.0157
.9	325.	-10.	-.9376	.4931	.0930	.1798	.0229	.0122
.9	330.	-10.	-.9749	.4737	.0838	.1699	.0239	.0093
.9	335.	-10.	-1.0027	.4510	.0787	.1602	.0261	.0059
.9	340.	-10.	-.9958	.4178	.0800	.1453	.0276	.0029
.9	345.	-10.	-.9991	.3925	.0923	.1308	.0311	-.0004
.9	350.	-10.	-.9860	.3606	.0977	.1139	.0329	-.0058
.9	355.	-10.	-.9825	.3098	.1043	.1125	.0364	-.0045

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDLE ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	[illegible]	-15.	-1.1304	.3[illegible]	.3277	.0946	.0709	.0212
.9	[illegible]	-15.	-1.0981	.3391	.3434	.0867	.0702	.0254
.9	[illegible]	-15.	-1.0511	.2717	.3737	.0814	.0775	.0291
.9	[illegible]	-15.	-1.0036	.1[illegible]	.3954	.1[illegible]	.0775	.0294
.9	[illegible]	-15.	-.9[illegible]	.0[illegible]	.4333	.1106	.0728	.0262
.9	25.	-15.	-.8230	-.0464	.3819	.1301	.0732	.0186
.9	30.	-15.	-.7255	-.1575	.3527	.1423	.0639	.0139
.9	35.	-15.	-.6305	-.2521	.3303	.1458	.0671	.0177
.9	40.	-15.	-.5641	-.3405	.2913	.1535	.0595	.0166
.9	45.	-15.	-.4941	-.4163	.2634	.1655	.0568	.0280
.9	50.	-15.	-.3903	-.4944	.2421	.1741	.0483	.0429
.9	55.	-15.	-.3152	-.5401	.1955	.1819	.0466	.0471
.9	60.	-15.	-.2401	-.5942	.1667	.1642	.0395	.0451
.9	65.	-15.	-.1343	-.6422	.1436	.1467	.0390	.0305
.9	70.	-15.	-.1103	-.6093	.1218	.1328	.0303	.0274
.9	75.	-15.	-.0524	-.5425	.0873	.1345	.0230	.0196
.9	80.	-15.	.0033	-.6077	.0520	.1378	.0192	.0109
.9	85.	-15.	.0421	-.6173	.0411	.1441	.0129	.0120
.9	90.	-15.	.0784	-.6297	.0322	.1515	.0118	.0073
.9	95.	-15.	.1146	-.6295	.0255	.1450	.0059	.0083
.9	100.	-15.	.1743	-.6173	.0345	.1374	.0076	.0051
.9	105.	-15.	.2533	-.6184	.0727	.1277	.0142	.0034
.9	110.	-15.	.3441	-.6344	.0892	.1137	.0155	.0039
.9	115.	-15.	.3952	-.6362	.0997	.0991	.0165	.0066
.9	120.	-15.	.5520	-.7145	.2942	.0340	.0337	.0176
.9	125.	-15.	.5422	-.7236	.2743	.0062	.0245	.0159
.9	130.	-15.	.7137	-.7055	.2556	-.0195	.0317	.0135
.9	135.	-15.	.7434	-.6884	.2336	-.0401	.0334	.0044
.9	140.	-15.	.8465	-.6597	.2993	-.0754	.0301	-.0021
.9	145.	-15.	.8883	-.6163	.3050	-.1098	.0382	-.0038
.9	150.	-15.	.9123	-.5614	.3162	-.1227	.0401	-.0064
.9	155.	-15.	.9379	-.4895	.3066	-.1434	.0342	-.0076
.9	160.	-15.	.9345	-.4038	.2891	-.1648	.0370	-.0114
.9	165.	-15.	.9209	-.3072	.2535	-.1833	.0363	-.0154
.9	170.	-15.	.9302	-.2349	.2729	-.2106	.0337	-.0077
.9	175.	-15.	.8937	-.1419	.2331	-.2260	.0301	-.0098
.9	180.	-15.	.8198	-.0495	.2294	-.2442	.0307	-.0086
.9	185.	-15.	.8084	-.0062	.2230	-.2709	.0296	-.0040
.9	190.	-15.	.7673	.0205	.2101	-.2945	.0233	.0062
.9	195.	-15.	.7341	.0176	.1845	-.3212	.0163	.0262
.9	200.	-15.	.6940	.0461	.1893	-.3261	.0128	.0310
.9	205.	-15.	.6859	.0318	.2091	-.3332	.0102	.0531
.9	210.	-15.	.6559	.0426	.2417	-.3287	.0074	.0803
.9	215.	-15.	.6248	.0647	.2582	-.3222	.0076	.0948
.9	220.	-15.	.5803	.0950	.2559	-.3101	.0088	.0982
.9	225.	-15.	.5120	.1364	.2625	-.2864	.0101	.1015
.9	230.	-15.	.4520	.1739	.2504	-.2565	.0100	.1008
.9	235.	-15.	.3887	.2288	.2679	-.2219	.0078	.1112
.9	240.	-15.	.4260	.2305	.3824	-.2125	.0078	.1245
.9	245.	-15.	.3510	.2607	.3692	-.1741	.0259	.1052
.9	250.	-15.	.2482	.3249	.3540	-.1478	.0352	.0891
.9	255.	-15.	.1322	.4096	.3199	-.1324	.0335	.0731
.9	260.	-15.	-.0020	.4610	.2791	-.0985	.0273	.0659
.9	265.	-15.	-.1114	.4997	.2702	-.0570	.0217	.0685
.9	270.	-15.	-.2116	.5191	.2659	-.0079	.0181	.0795
.9	275.	-15.	-.3095	.5400	.2377	.0385	.0165	.0818
.9	280.	-15.	-.4041	.5564	.2196	.0789	.0124	.0835
.9	285.	-15.	-.5106	.5770	.1979	.1154	.0089	.0798
.9	290.	-15.	-.6079	.5847	.1598	.1518	.0043	.0691
.9	295.	-15.	-.6853	.5877	.1303	.1783	.0005	.0601
.9	300.	-15.	-.7511	.5879	.1221	.1872	.0014	.0518
.9	305.	-15.	-.7859	.5808	.1014	.1822	.0043	.0389
.9	310.	-15.	-.8080	.5547	.1249	.1859	.0128	.0314
.9	315.	-15.	-.8452	.5459	.1561	.1885	.0260	.0273
.9	320.	-15.	-.8985	.5272	.1709	.1834	.0316	.0281
.9	325.	-15.	-.9280	.4935	.1891	.1754	.0365	.0324
.9	330.	-15.	-.9676	.4723	.1954	.1686	.0419	.0299
.9	335.	-15.	-.9909	.4546	.2019	.1578	.0461	.0300
.9	340.	-15.	-.9930	.4267	.2097	.1443	.0477	.0270
.9	345.	-15.	-1.0020	.4027	.2085	.1290	.0511	.0196
.9	350.	-15.	-.9929	.3673	.2215	.1175	.0577	.0151
.9	355.	-15.	-.9731	.3117	.2249	.1139	.0591	.0140

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-30.	-1.0730	.3852	.7250	.1005	.1583	.0723
.9	5.	-30.	-1.0207	.3043	.6851	.1017	.1379	.1130
.9	10.	-30.	-.8774	.2567	.6328	.1074	.1395	.1370
.9	15.	-30.	-.6872	.1945	.5543	.1073	.1385	.0946
.9	20.	-30.	-.4934	.1111	.4715	.1000	.1418	.0424
.9	25.	-30.	-.3023	.0272	.3937	.1038	.1378	.0505
.9	30.	-30.	-.1138	-.0772	.3383	.1248	.1298	.0530
.9	35.	-30.	-.0483	-.1717	.3101	.1393	.1265	.0524
.9	40.	-30.	-.2734	-.2583	.3165	.1560	.1222	.0507
.9	45.	-30.	-.5037	-.3367	.3350	.1645	.1234	.0504
.9	50.	-30.	-.4135	-.3923	.3777	.1798	.1184	.0574
.9	55.	-30.	-.3651	-.4471	.3971	.1751	.1125	.0638
.9	60.	-30.	-.2473	-.4884	.3117	.1673	.1031	.0703
.9	65.	-30.	-.2049	-.5367	.2732	.1649	.0955	.0721
.9	70.	-30.	-.1171	-.5691	.2458	.1519	.0901	.0673
.9	75.	-30.	-.0401	-.5914	.2061	.1462	.0827	.0556
.9	80.	-30.	.0252	-.6049	.1881	.1436	.0754	.0391
.9	85.	-30.	.0854	-.6092	.1709	.1358	.0706	.0261
.9	90.	-30.	.1736	-.6157	.1519	.1247	.0703	.0646
.9	95.	-30.	.2713	-.6196	.1415	.1155	.0735	.0534
.9	100.	-30.	.2914	-.6194	.1253	.1054	.0776	.0531
.9	105.	-30.	.3444	-.6041	.1057	.0894	.0753	.0619
.9	110.	-30.	.4101	-.5935	.0933	.0742	.0795	.0552
.9	115.	-30.	.4707	-.5747	.0812	.0524	.0735	.0100
.9	120.	-30.	.5329	-.5496	.0729	.0202	.0767	.0462
.9	125.	-30.	.5112	-.5702	.0723	-.0071	.0675	.0559
.9	130.	-30.	.5944	-.5444	.0723	-.0339	.0679	.0509
.9	135.	-30.	.6034	-.5094	.0747	-.0631	.0698	.0567
.9	140.	-30.	.6155	-.5646	.0937	-.0971	.0642	.0533
.9	145.	-30.	.6521	-.5247	.7131	-.1233	.6660	.0605
.9	150.	-30.	.6722	-.4752	.7207	-.1452	.6688	.0620
.9	155.	-30.	.6934	-.4113	.7165	-.1636	.0661	.0630
.9	160.	-30.	.7134	-.3499	.7115	-.1924	.0600	.0602
.9	165.	-30.	.6943	-.2827	.6944	-.2193	.0598	.0728
.9	170.	-30.	.6743	-.2011	.6788	-.2230	.0525	.0703
.9	175.	-30.	.6468	-.1314	.6662	-.2346	.0475	.0644
.9	180.	-30.	.6310	-.0716	.6145	-.2540	.0414	.0723
.9	185.	-30.	.6330	-.0437	.5780	-.2784	.0326	.0839
.9	190.	-30.	.6232	.0021	.5616	-.2982	.0275	.0918
.9	195.	-30.	.7810	.0404	.5622	-.3135	.0258	.1032
.9	200.	-30.	.7666	.0686	.5652	-.3226	.0227	.1211
.9	205.	-30.	.7497	.0801	.5784	-.3218	.0232	.1353
.9	210.	-30.	.7238	.0885	.5969	-.3184	.0221	.1557
.9	215.	-30.	.6890	.1035	.6076	-.3143	.0215	.1700
.9	220.	-30.	.6632	.1155	.6078	-.3099	.0210	.1826
.9	225.	-30.	.6309	.1429	.6197	-.2976	.0232	.1953
.9	230.	-30.	.5547	.1630	.5969	-.2721	.0296	.1896
.9	235.	-30.	.4702	.2266	.6457	-.2440	.0365	.2024
.9	240.	-30.	.3700	.2689	.6809	-.2134	.0437	.2053
.9	245.	-30.	.3836	.2598	.7852	-.1882	.0551	.2332
.9	250.	-30.	.2687	.3427	.6717	-.1508	.0482	.1973
.9	255.	-30.	.1607	.4013	.6849	-.1197	.0500	.1975
.9	260.	-30.	.0451	.4535	.7141	-.0946	.0539	.2059
.9	265.	-30.	-.0859	.4961	.7177	-.0587	.0574	.2135
.9	270.	-30.	-.2006	.5268	.6712	-.0217	.0580	.2087
.9	275.	-30.	-.3004	.5479	.6377	.0122	.0602	.2007
.9	280.	-30.	-.3830	.5613	.6378	.0444	.0613	.2011
.9	285.	-30.	-.4491	.5595	.6298	.0648	.0611	.1962
.9	290.	-30.	-.5268	.5658	.6300	.0844	.0622	.1917
.9	295.	-30.	-.6055	.5746	.6353	.1076	.0652	.1877
.9	300.	-30.	-.6424	.5689	.6074	.1157	.0651	.1734
.9	305.	-30.	-.6631	.5588	.6085	.1254	.0697	.1666
.9	310.	-30.	-.7006	.5445	.6125	.1334	.0765	.1602
.9	315.	-30.	-.7652	.5220	.5988	.1425	.0800	.1480
.9	320.	-30.	-.8112	.4916	.5853	.1470	.0852	.1359
.9	325.	-30.	-.8554	.4705	.5842	.1471	.0925	.1230
.9	330.	-30.	-.8716	.4421	.5772	.1335	.0982	.1101
.9	335.	-30.	-.9075	.4315	.5627	.1246	.1024	.0943
.9	340.	-30.	-.9283	.4092	.5667	.1246	.1064	.0859
.9	345.	-30.	-.9276	.3810	.5863	.1233	.1128	.0818
.9	350.	-30.	-.9039	.3368	.6131	.1190	.1195	.0831
.9	355.	-30.	-.8590	.2877	.6069	.1138	.1249	.0712

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-45.	-.8303	.3999	1.0314	.0644	.1832	.1534
.9	5.	-45.	-.8253	.3121	1.0591	.0637	.1852	.1424
.9	10.	-45.	-.8156	.2714	1.0334	.0734	.1941	.1403
.9	15.	-45.	-.8213	.2511	1.0740	.0834	.1765	.1320
.9	20.	-45.	-.7884	.1931	1.0365	.0891	.1821	.1225
.9	25.	-45.	-.8017	.0879	1.0094	.0475	.1791	.1229
.9	30.	-45.	-.8268	.0175	1.0269	.0955	.1761	.1144
.9	35.	-45.	-.8946	-.0019	1.0380	.1107	.1706	.1058
.9	40.	-45.	-.8277	-.1192	1.0366	.1211	.1625	.1006
.9	45.	-45.	-.8146	-.2114	1.0435	.1377	.1529	.0976
.9	50.	-45.	-.8426	-.2835	1.0528	.1498	.1640	.1019
.9	55.	-45.	-.8215	-.3867	1.0113	.1524	.1549	.1054
.9	60.	-45.	-.8157	-.3994	.9839	.1548	.1460	.1098
.9	65.	-45.	-.8436	-.4101	.9654	.1521	.1410	.1076
.9	70.	-45.	-.8068	-.4456	.9439	.1457	.1355	.1054
.9	75.	-45.	.8147	-.4695	.9134	.1374	.1295	.0983
.9	80.	-45.	.8032	-.4876	.8892	.1346	.1256	.0934
.9	85.	-45.	.8075	-.4967	.8852	.1321	.1324	.0739
.9	90.	-45.	.8034	-.4845	.8735	.1135	.1307	.0592
.9	95.	-45.	.8105	-.4790	.8988	.1057	.1283	.0612
.9	100.	-45.	.7743	-.4934	.8881	.0805	.1284	.0543
.9	105.	-45.	.8417	-.5017	.8833	.0647	.1292	.0506
.9	110.	-45.	.8112	-.4973	.8525	.0476	.1279	.0447
.9	115.	-45.	.8657	-.4807	.8527	.0245	.1257	.0400
.9	120.	-45.	.8342	-.5343	.8883	.0319	.1135	.0337
.9	125.	-45.	.8097	-.5078	1.0020	.0500	.1129	.0889
.9	130.	-45.	.8167	-.5244	1.0367	-.0208	.1086	.0915
.9	135.	-45.	.8704	-.4981	.9948	-.0494	.1067	.0929
.9	140.	-45.	.8344	-.4812	.9881	-.0775	.0947	.0950
.9	145.	-45.	.8054	-.4124	.9898	-.1052	.0897	.0957
.9	150.	-45.	.8042	-.3669	.9247	-.1279	.0799	.0984
.9	155.	-45.	.7854	-.3114	.9145	-.1474	.0740	.1022
.9	160.	-45.	.7833	-.2535	.8981	-.1737	.0681	.1070
.9	165.	-45.	.7842	-.2099	.9014	-.1927	.0697	.1119
.9	170.	-45.	.7817	-.1685	.8957	-.2102	.0609	.1141
.9	175.	-45.	.7731	-.1245	.8993	-.2445	.0582	.1256

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	180.	-45.	.7436	-.0670	.8942	-.2455	.0509	.1336
.9	185.	-45.	.7278	-.0262	.8891	-.2527	.0473	.1396
.9	190.	-45.	.7199	-.0052	.8832	-.2574	.0456	.1488
.9	195.	-45.	.7163	.0273	.8906	-.2649	.0459	.1621
.9	200.	-45.	.7124	.0468	.9138	-.2729	.0491	.1805
.9	205.	-45.	.6855	.0644	.9209	-.2755	.0499	.1943
.9	210.	-45.	.6570	.0807	.9224	-.2706	.0479	.2100
.9	215.	-45.	.6158	.1061	.9233	-.2597	.0453	.2258
.9	220.	-45.	.5731	.1254	.9229	-.2447	.0441	.2376
.9	225.	-45.	.5252	.1463	.9260	-.2271	.0436	.2529
.9	230.	-45.	.4671	.1694	.9454	-.2065	.0461	.2664
.9	235.	-45.	.4079	.2142	.9813	-.1896	.0562	.2812
.9	240.	-45.	.4425	.1880	.9659	-.1719	.0559	.2781
.9	245.	-45.	.3408	.2360	.9829	-.1433	.0602	.2893
.9	250.	-45.	.2435	.2864	.9924	-.1152	.0682	.2910
.9	255.	-45.	.1464	.3341	.9937	-.0834	.0764	.2877
.9	260.	-45.	.0626	.3686	.9896	-.0592	.0834	.2824
.9	265.	-45.	-.0136	.3948	.9806	-.0383	.0867	.2795
.9	270.	-45.	-.0822	.4193	.9846	-.0222	.0932	.2768
.9	275.	-45.	-.1420	.4414	.9849	-.0121	.0977	.2776
.9	280.	-45.	-.2169	.4025	.9906	.0059	.1013	.2810
.9	285.	-45.	-.2970	.4812	.9976	.0280	.1060	.2781
.9	290.	-45.	-.3384	.4696	1.0014	.0448	.1113	.2739
.9	295.	-45.	-.3801	.4728	1.0267	.0529	.1223	.2742
.9	300.	-45.	-.4263	.4643	1.0488	.0635	.1283	.2748
.9	305.	-45.	-.4787	.4468	1.0336	.0709	.1282	.2702
.9	310.	-45.	-.5474	.4436	1.0425	.0809	.1336	.2635
.9	315.	-45.	-.5937	.4308	1.0445	.0854	.1386	.2535
.9	320.	-45.	-.6352	.4156	1.0393	.0880	.1407	.2431
.9	325.	-45.	-.6732	.4016	1.0280	.0877	.1434	.2295
.9	330.	-45.	-.7004	.3740	1.0107	.0920	.1457	.2171
.9	335.	-45.	-.7071	.3534	1.0014	.0907	.1511	.2023
.9	340.	-45.	-.7036	.3365	.9966	.0878	.1576	.1879
.9	345.	-45.	-.7337	.3029	1.0027	.0981	.1646	.1762
.9	350.	-45.	-.6927	.2757	1.0213	.0876	.1734	.1674
.9	355.	-45.	-.6773	.2587	.9966	.0882	.1710	.1598

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-0.	-1.2848	.4117	-.0121	.1207	-.0001	-.0030
1.2	5.	-0.	-1.2473	.3336	-.0191	.1329	-.0007	-.0044
1.2	10.	-0.	-1.2031	.2582	-.0228	.1467	-.0000	-.0053
1.2	15.	-0.	-1.1529	.1777	-.0238	.1614	-.0009	-.0043
1.2	20.	-0.	-1.0369	.0440	-.0247	.1653	-.0001	-.0068
1.2	25.	-0.	-.9541	-.0802	-.0233	.1775	.0003	-.0073
1.2	30.	-0.	-.8437	-.2045	-.0183	.1827	.0011	-.0034
1.2	35.	-0.	-.7342	-.3140	-.0115	.1831	-.0006	.0002
1.2	40.	-0.	-.6303	-.4252	-.0137	.1822	-.0032	-.0005
1.2	45.	-0.	-.5544	-.5133	-.0087	.1864	-.0016	-.0016
1.2	50.	-0.	-.4508	-.5982	-.0110	.1846	-.0009	-.0032
1.2	55.	-0.	-.3593	-.6639	-.0126	.1746	-.0017	-.0023
1.2	60.	-0.	-.2671	-.0774	-.0118	.1629	-.0024	-.0017
1.2	65.	-0.	-.2042	-.7041	-.0089	.1634	-.0037	-.0003
1.2	70.	-0.	-.1667	-.7195	-.0044	.1617	-.0023	-.0027
1.2	75.	-0.	-.0934	-.7271	-.0113	.1562	-.0043	-.0010
1.2	80.	-0.	-.0388	-.7364	-.0258	.1656	-.0080	-.0011
1.2	85.	-0.	.0414	-.7247	-.0240	.1569	-.0056	-.0034
1.2	90.	-0.	.1159	-.7181	-.0109	.1574	-.0016	-.0049
1.2	95.	-0.	.1752	-.7380	-.0114	.1552	-.0020	-.0028
1.2	100.	-0.	.2643	-.7200	-.0116	.1475	-.0022	-.0019
1.2	105.	-0.	.2935	-.7071	-.0307	.1349	-.0047	-.0023
1.2	110.	-0.	.3532	-.7074	-.0402	.1266	-.0056	-.0009
1.2	115.	-0.	.4175	-.6995	-.0854	.1073	-.0158	.0028
1.2	120.	-0.	.5228	-.8352	-.0287	.0420	-.0008	-.0060
1.2	125.	-0.	.7224	-.7945	-.0342	.0135	-.0005	-.0120
1.2	130.	-0.	.8116	-.7395	-.0454	-.0135	-.0012	-.0116
1.2	135.	-0.	.8945	-.7745	-.0543	-.0525	-.0013	-.0130
1.2	140.	-0.	.9457	-.7321	-.0519	-.0847	-.0001	-.0142
1.2	145.	-0.	1.0363	-.7125	-.0484	-.1143	-.0001	-.0141
1.2	150.	-0.	1.0548	-.6514	-.0461	-.1362	-.0004	-.0133
1.2	155.	-0.	1.0921	-.5904	-.0452	-.1610	-.0007	-.0144
1.2	160.	-0.	1.0949	-.5171	-.0342	-.1830	.0007	-.0127
1.2	165.	-0.	1.0877	-.4274	-.0322	-.2012	.0018	-.0134
1.2	170.	-0.	1.0753	-.3073	-.0367	-.2139	.0021	-.0153
1.2	175.	-0.	1.0034	-.2029	-.0303	-.2379	.0024	-.0107
1.2	180.	-0.	.9650	-.1271	-.0261	-.2801	.0028	-.0091
1.2	185.	-0.	.9147	-.0559	-.0179	-.3023	.0010	-.0048
1.2	190.	-0.	.8719	-.0066	-.0225	-.3271	.0031	-.0104
1.2	195.	-0.	.8195	.0342	-.0169	-.3485	.0042	-.0122
1.2	200.	-0.	.7780	.0259	-.0227	-.3573	.0038	-.0140
1.2	205.	-0.	.7569	.0407	-.0196	-.3567	.0033	-.0121
1.2	210.	-0.	.7278	.0726	-.0130	-.3517	.0036	-.0069
1.2	215.	-0.	.6802	.0950	-.0152	-.3408	.0032	-.0041
1.2	220.	-0.	.6238	.1293	-.0178	-.3253	.0023	-.0016
1.2	225.	-0.	.5520	.1651	-.0174	-.2968	.0010	-.0006
1.2	230.	-0.	.4689	.1987	-.0153	-.2643	.0029	-.0036
1.2	235.	-0.	.3849	.2300	-.0316	-.2316	.0015	-.0089
1.2	240.	-0.	.4207	.2821	-.0263	-.2151	-.0027	-.0114
1.2	245.	-0.	.3462	.3336	-.0263	-.1804	-.0019	-.0120
1.2	250.	-0.	.2539	.3544	-.0284	-.1376	-.0050	-.0086
1.2	255.	-0.	.1583	.3494	-.0369	-.0873	-.0035	-.0141
1.2	260.	-0.	.0586	.3781	-.0362	-.0545	-.0017	-.0174
1.2	265.	-0.	-.0648	.4507	-.0421	-.0334	-.0022	-.0184
1.2	270.	-0.	-.1760	.4989	-.0339	.0030	-.0016	-.0082
1.2	275.	-0.	-.3027	.5544	-.0297	.0442	-.0016	-.0113
1.2	280.	-0.	-.4189	.5920	-.0255	.0857	-.0013	-.0113
1.2	285.	-0.	-.5357	.6287	-.0172	.1280	.0006	-.0110
1.2	290.	-0.	-.6468	.6484	-.0531	.1689	-.0022	-.0069
1.2	295.	-0.	-.7521	.6729	-.0352	.1973	-.0003	-.0129
1.2	300.	-0.	-.8291	.6788	-.0305	.2094	-.0010	-.0120
1.2	305.	-0.	-.8988	.6780	-.0471	.2143	-.0015	-.0156
1.2	310.	-0.	-.9495	.6773	-.0599	.2050	-.0018	-.0167
1.2	315.	-0.	-.9936	.6552	-.0333	.2021	.0030	-.0143
1.2	320.	-0.	-1.0485	.6208	-.0393	.1956	.0025	-.0167
1.2	325.	-0.	-1.0808	.5750	-.0462	.1898	.0008	-.0153
1.2	330.	-0.	-1.1109	.5404	-.0528	.1851	.0003	-.0165
1.2	335.	-0.	-1.1218	.5072	-.0491	.1730	-.0018	-.0158
1.2	340.	-0.	-1.1222	.4670	-.0450	.1593	-.0020	-.0138
1.2	345.	-0.	-1.0961	.4196	-.0511	.1480	-.0034	-.0142
1.2	350.	-0.	-1.0661	.3739	-.0548	.1376	-.0032	-.0156
1.2	355.	-0.	-1.0253	.3259	-.0551	.1215	.0009	-.0156

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-5.	-1.2725	.4554	.1261	.1255	.0251	.0051
1.2	5.	-5.	-1.2335	.3812	.1332	.1318	.0260	.0028
1.2	10.	-5.	-1.2041	.2927	.1339	.1467	.0295	.0040
1.2	15.	-5.	-1.1274	.1423	.1278	.1580	.0237	.0049
1.2	20.	-5.	-1.0282	.0424	.1348	.1642	.0229	.0079
1.2	25.	-5.	-.9493	-.0704	.1332	.1720	.0262	.0102
1.2	30.	-5.	-.8428	-.1902	.1348	.1734	.0177	.0146
1.2	35.	-5.	-.7423	-.3065	.1393	.1830	.0154	.0183
1.2	40.	-5.	-.6433	-.4132	.1378	.1903	.0198	.0190
1.2	45.	-5.	-.5571	-.5123	.1284	.1911	.0193	.0224
1.2	50.	-5.	-.4730	-.6095	.1275	.1943	.0204	.0254
1.2	55.	-5.	-.3859	-.6927	.1285	.1912	.0237	.0221
1.2	60.	-5.	-.2953	-.6795	.1022	.1799	.0223	.0167
1.2	65.	-5.	-.2149	-.6951	.0891	.1653	.0216	.0120
1.2	70.	-5.	-.1527	-.7142	.0770	.1540	.0185	.0150
1.2	75.	-5.	-.0722	-.7305	.0664	.1534	.0148	.0169
1.2	80.	-5.	-.0101	-.7386	.0781	.1653	.0198	.0110
1.2	85.	-5.	.0640	-.7378	.0483	.1670	.0193	.0202
1.2	90.	-5.	.1323	-.7394	.0231	.1623	.0044	.0141
1.2	95.	-5.	.1957	-.7314	.0445	.1511	.0069	.0042
1.2	100.	-5.	.2235	-.7240	.0345	.1478	.0038	.0100
1.2	105.	-5.	.2408	-.7204	.0320	.1429	.0008	.0116
1.2	110.	-5.	.3714	-.7387	.0478	.1321	.0027	.0149
1.2	115.	-5.	.4281	-.7301	-.0154	.1103	-.0049	.0091
1.2	120.	-5.	.5358	-.8127	.0325	.0375	.0069	.0017
1.2	125.	-5.	.7258	-.8346	.1051	.0004	.0115	.0036
1.2	130.	-5.	.8047	-.7895	.1141	-.0277	.0151	-.0005
1.2	135.	-5.	.9017	-.7725	.1236	-.0621	.0179	-.0018
1.2	140.	-5.	.9598	-.7567	.1243	-.0938	.0193	-.0057
1.2	145.	-5.	1.0341	-.6971	.1303	-.1211	.0203	-.0048
1.2	150.	-5.	1.0811	-.6435	.1314	-.1491	.0209	-.0055
1.2	155.	-5.	1.1034	-.5758	.1160	-.1701	.0202	-.0114
1.2	160.	-5.	1.0975	-.5159	.1192	-.1839	.0198	-.0079
1.2	165.	-5.	1.0632	-.4110	.1224	-.2015	.0196	-.0084
1.2	170.	-5.	1.0282	-.3163	.0975	-.2236	.0154	-.0127
1.2	175.	-5.	1.0179	-.2123	.1004	-.2477	.0170	-.0071
1.2	180.	-5.	.3717	-.1227	.0963	-.2772	.0161	-.0076
1.2	185.	-5.	.8920	-.0275	.0943	-.3025	.0161	-.0080
1.2	190.	-5.	.8720	.0145	.0988	-.3210	.0165	-.0034
1.2	195.	-5.	.8088	.0413	.0893	-.3416	.0140	.0050
1.2	200.	-5.	.7666	.0458	.0844	-.3508	.0079	.0167
1.2	205.	-5.	.7401	.0647	.0871	-.3530	.0054	.0264
1.2	210.	-5.	.7085	.0861	.0961	-.3467	.0046	.0360
1.2	215.	-5.	.6606	.1123	.1164	-.3383	.0087	.0584
1.2	220.	-5.	.6048	.1375	.1114	-.3205	-.0023	.0639
1.2	225.	-5.	.5380	.1641	.0976	-.2962	-.0029	.0589
1.2	230.	-5.	.4643	.1951	.0751	-.2637	-.0045	.0510
1.2	235.	-5.	.3778	.2208	.0543	-.2255	-.0074	.0466
1.2	240.	-5.	.4228	.2780	.1387	-.2182	-.0045	.0462
1.2	245.	-5.	.3390	.3311	.1195	-.1797	.0033	.0285
1.2	250.	-5.	.2531	.3662	.1133	-.1392	.0091	.0126
1.2	255.	-5.	.1580	.3798	.1138	-.0972	.0138	.0076
1.2	260.	-5.	.0526	.4209	.1154	-.0748	.0169	-.0006
1.2	265.	-5.	-.0678	.4739	.1248	-.0453	.0191	.0025
1.2	270.	-5.	-.1940	.5314	.1297	-.0093	.0174	.0147
1.2	275.	-5.	-.3295	.5916	.1253	.0307	.0131	.0240
1.2	280.	-5.	-.4586	.6329	.0971	.0784	.0035	.0275
1.2	285.	-5.	-.5610	.6503	.0758	.1305	.0010	.0245
1.2	290.	-5.	-.6592	.6576	.0672	.1730	.0008	.0214
1.2	295.	-5.	-.7412	.6704	.0625	.1914	.0014	.0195
1.2	300.	-5.	-.8281	.6853	.0582	.2029	.0023	.0159
1.2	305.	-5.	-.8988	.6782	.0386	.2099	.0031	.0118
1.2	310.	-5.	-.9513	.6642	.0313	.2109	.0079	.0032
1.2	315.	-5.	-.9949	.6454	.0418	.2061	.0142	-.0003
1.2	320.	-5.	-1.0464	.6124	.0536	.2015	.0172	.0043
1.2	325.	-5.	-1.0900	.5795	.0567	.1944	.0187	.0027
1.2	330.	-5.	-1.1053	.5361	.0519	.1862	.0178	.0020
1.2	335.	-5.	-1.1215	.4985	.0452	.1765	.0185	-.0016
1.2	340.	-5.	-1.1232	.4685	.0406	.1629	.0183	-.0032
1.2	345.	-5.	-1.0940	.4249	.0498	.1479	.0182	-.0028
1.2	350.	-5.	-1.0623	.3813	.0538	.1336	.0178	-.0019
1.2	355.	-5.	-1.0302	.3323	.0494	.1213	.0184	-.0024

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-10.	-1.1305	.3729	.3233	.1214	.0511	.0497
1.2	5.	-10.	-1.1412	.3565	.2983	.1241	.0557	.0218
1.2	10.	-10.	-1.1340	.3194	.2490	.1334	.0558	.0214
1.2	15.	-10.	-1.1037	.2695	.1934	.1434	.0494	.0192
1.2	20.	-10.	-.9742	.2244	.1502	.1615	.0471	.0254
1.2	25.	-10.	-.8439	-.1951	.1143	.1696	.0435	.0337
1.2	30.	-10.	-.7341	-.2111	.0135	.1812	.0432	.0340
1.2	35.	-10.	-.7008	-.3347	.2449	.1914	.0437	.0336
1.2	40.	-10.	-.6242	-.4149	.2864	.1933	.0432	.0370
1.2	45.	-10.	-.5454	-.5219	.2615	.1945	.0431	.0420
1.2	50.	-10.	-.4574	-.5972	.2424	.2004	.0399	.0433
1.2	55.	-10.	-.3736	-.6415	.2327	.2042	.0450	.0404
1.2	60.	-10.	-.2445	-.6548	.2248	.1941	.0484	.0343
1.2	65.	-10.	-.2265	-.6564	.2171	.1791	.0464	.0330
1.2	70.	-10.	-.1348	-.6548	.1815	.1553	.0345	.0300
1.2	75.	-10.	-.0135	-.6451	.1527	.1545	.0239	.0282
1.2	80.	-10.	.0459	-.6354	.1498	.1545	.0244	.0256
1.2	85.	-10.	.0975	-.6082	.1356	.1609	.0217	.0202
1.2	90.	-10.	.1555	-.5467	.1279	.1565	.0141	.0115
1.2	95.	-10.	.2155	-.4785	.1704	.1535	.0038	.0141
1.2	100.	-10.	.2536	-.4134	.1143	.1443	.0154	.0152
1.2	105.	-10.	.3342	-.3215	.1104	.1321	.0102	.0093
1.2	110.	-10.	.4101	-.2442	.1320	.1134	.0126	.0102
1.2	115.	-10.	.4841	-.1853	.0778	.0951	.0079	.0137
1.2	120.	-10.	.5277	-.1327	.0242	.0260	.0189	.0207
1.2	125.	-10.	.7364	-.0567	.2211	-.0035	.0241	.0168
1.2	130.	-10.	.7445	-.0255	.2023	-.0337	.0268	.0171
1.2	135.	-10.	.8341	-.0103	.2814	-.0703	.0361	.0176
1.2	140.	-10.	.8778	-.0345	.2759	-.1011	.0315	.0133
1.2	145.	-10.	1.0317	-.0945	.2365	-.1278	.0349	.0110
1.2	150.	-10.	1.0805	-.0453	.3352	-.1505	.0366	.0133
1.2	155.	-10.	1.0344	-.0732	.2954	-.1744	.0354	.0111
1.2	160.	-10.	1.0377	-.0397	.2853	-.1958	.0357	.0090
1.2	165.	-10.	1.0361	-.0193	.2732	-.2143	.0335	.0082
1.2	170.	-10.	1.0717	-.0156	.2514	-.2343	.0315	.0063
1.2	175.	-10.	1.0543	-.0260	.2349	-.2519	.0245	.0074
1.2	180.	-10.	.9867	-.1292	.2387	-.2822	.0282	.0116
1.2	185.	-10.	.9419	-.0538	.2464	-.2993	.0295	.0161
1.2	190.	-10.	.8835	-.0062	.2259	-.3268	.0247	.0260
1.2	195.	-10.	.8532	.0305	.2219	-.3442	.0205	.0375
1.2	200.	-10.	.7924	.0561	.2185	-.3524	.0143	.0430
1.2	205.	-10.	.7499	.0764	.2169	-.3543	.0093	.0598
1.2	210.	-10.	.7199	.0883	.2298	-.3476	.0044	.0816
1.2	215.	-10.	.6692	.1101	.2435	-.3361	-.0001	.1013
1.2	220.	-10.	.6095	.1375	.2391	-.3205	-.0027	.1095
1.2	225.	-10.	.5475	.1704	.2186	-.2950	-.0034	.1062
1.2	230.	-10.	.4629	.1884	.1718	-.2570	-.0030	.0891
1.2	235.	-10.	.3820	.2200	.1400	-.2226	-.0044	.0772
1.2	240.	-10.	.4512	.2715	.2723	-.2234	-.0021	.0906
1.2	245.	-10.	.3641	.3163	.2617	-.1835	.0084	.0739
1.2	250.	-10.	.2417	.3807	.2460	-.1456	.0252	.0441
1.2	255.	-10.	.1533	.4205	.2364	-.1211	.0288	.0288
1.2	260.	-10.	.0362	.4723	.2417	-.1017	.0325	.0232
1.2	265.	-10.	-.0859	.5271	.2532	-.0680	.0325	.0276
1.2	270.	-10.	-.2032	.5727	.2656	-.0251	.0299	.0381
1.2	275.	-10.	-.3283	.6128	.2512	.0235	.0238	.0485
1.2	280.	-10.	-.4454	.6432	.2283	.0625	.0168	.0564
1.2	285.	-10.	-.5595	.6657	.1961	.1105	.0111	.0568
1.2	290.	-10.	-.6620	.6762	.1705	.1547	.0083	.0521
1.2	295.	-10.	-.7478	.6785	.1642	.1826	.0074	.0517
1.2	300.	-10.	-.8342	.6791	.1494	.2016	.0109	.0443
1.2	305.	-10.	-.8939	.6744	.1387	.2085	.0139	.0359
1.2	310.	-10.	-.9510	.6557	.1185	.2161	.0176	.0221
1.2	315.	-10.	-.9886	.6291	.1295	.2125	.0255	.0165
1.2	320.	-10.	-1.0383	.6055	.1429	.1980	.0317	.0180
1.2	325.	-10.	-1.0759	.5802	.1519	.1906	.0341	.0177
1.2	330.	-10.	-1.0975	.5382	.1421	.1849	.0351	.0113
1.2	335.	-10.	-1.1008	.4999	.1454	.1737	.0364	.0122
1.2	340.	-10.	-1.0944	.4643	.1413	.1609	.0372	.0092
1.2	345.	-10.	-1.0753	.4276	.1399	.1435	.0369	.0084
1.2	350.	-10.	-1.0473	.3780	.1466	.1313	.0379	.0073
1.2	355.	-10.	-1.0116	.3212	.1504	.1230	.0392	.0078

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-15.	-1.1533	.3658	.4781	.1192	.0786	.0672
1.2	5.	-15.	-1.1227	.2963	.4933	.1279	.0783	.0712
1.2	10.	-15.	-1.0813	.2334	.4938	.1379	.0795	.0439
1.2	15.	-15.	-1.0270	.1054	.4558	.1446	.0789	.0434
1.2	20.	-15.	-.9523	.0613	.4578	.1672	.0728	.0421
1.2	25.	-15.	-.8621	-.1071	.4075	.1707	.0700	.0450
1.2	30.	-15.	-.7855	-.2191	.4026	.1887	.0637	.0458
1.2	35.	-15.	-.6842	-.3236	.3444	.1882	.0655	.0391
1.2	40.	-15.	-.5945	-.4193	.2947	.1854	.0550	.0461
1.2	45.	-15.	-.5284	-.5161	.4061	.1994	.0535	.0542
1.2	50.	-15.	-.4386	-.5947	.3760	.2045	.0620	.0537
1.2	55.	-15.	-.3573	-.6577	.3668	.2082	.0615	.0537
1.2	60.	-15.	-.2757	-.6595	.3579	.1953	.0589	.0534
1.2	65.	-15.	-.1904	-.6669	.3417	.1748	.0566	.0485
1.2	70.	-15.	-.0970	-.7079	.3205	.1594	.0524	.0498
1.2	75.	-15.	-.0030	-.7412	.2453	.1552	.0481	.0382
1.2	80.	-15.	.0718	-.7629	.2514	.1504	.0441	.0287
1.2	85.	-15.	.1311	-.7741	.2042	.1524	.0346	.0277
1.2	90.	-15.	.2110	-.7844	.1799	.1435	.0285	.0144
1.2	95.	-15.	.2819	-.7427	.1574	.1437	.0243	.0118
1.2	100.	-15.	.3312	-.7363	.1743	.1301	.0262	.0110
1.2	105.	-15.	.4108	-.7289	.1734	.1191	.0201	.0088
1.2	110.	-15.	.4834	-.7156	.1718	.1042	.0268	.0100
1.2	115.	-15.	.5292	-.6923	.1801	.0805	.0227	.0143
1.2	120.	-15.	.5210	-.7413	.3576	.0138	.0329	.0337
1.2	125.	-15.	.7373	-.7862	.3540	-.0146	.0338	.0328
1.2	130.	-15.	.8154	-.7671	.3339	-.0455	.0379	.0318
1.2	135.	-15.	.8979	-.7566	.4359	-.0747	.0440	.0360
1.2	140.	-15.	.9693	-.7215	.4359	-.1093	.0473	.0333
1.2	145.	-15.	1.0136	-.6795	.4477	-.1329	.0490	.0291
1.2	150.	-15.	1.0544	-.6329	.4643	-.1619	.0502	.0331
1.2	155.	-15.	1.0934	-.5643	.4056	-.1852	.0496	.0314
1.2	160.	-15.	1.0997	-.4917	.4585	-.2004	.0491	.0307
1.2	165.	-15.	1.0943	-.4157	.4416	-.2276	.0472	.0277
1.2	170.	-15.	1.0665	-.3138	.4092	-.2473	.0440	.0266
1.2	175.	-15.	1.0489	-.2365	.3827	-.2693	.0399	.0341

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	180.	-15.	.9993	-.1484	.3893	-.2888	.0384	.0399
1.2	185.	-15.	.9530	-.0652	.3943	-.3039	.0374	.0462
1.2	190.	-15.	.9048	-.0161	.3639	-.3292	.0318	.0531
1.2	195.	-15.	.8639	.0263	.3527	-.3471	.0256	.0654
1.2	200.	-15.	.8286	.0673	.3571	-.3616	.0205	.0826
1.2	205.	-15.	.7776	.0861	.3734	-.3612	.0159	.1031
1.2	210.	-15.	.7375	.0995	.3893	-.3592	.0103	.1273
1.2	215.	-15.	.0834	.1183	.3822	-.3417	.0043	.1411
1.2	220.	-15.	.0192	.1380	.3549	-.3157	.0034	.1400
1.2	225.	-15.	.5494	.1665	.3162	-.2878	.0039	.1313
1.2	230.	-15.	.4824	.1968	.2782	-.2610	.0059	.1202
1.2	235.	-15.	.4218	.2253	.2459	-.2296	.0041	.1114
1.2	240.	-15.	.4686	.2707	.4352	-.2251	.0100	.1371
1.2	245.	-15.	.3695	.3163	.4194	-.1841	.0318	.1126
1.2	250.	-15.	.2582	.3633	.4027	-.1569	.0417	.0925
1.2	255.	-15.	.1541	.4573	.3941	-.1436	.0455	.0785
1.2	260.	-15.	.0258	.5249	.3970	-.1195	.0453	.0703
1.2	265.	-15.	-.0908	.5700	.4088	-.0842	.0453	.0697
1.2	270.	-15.	-.2133	.6112	.3895	-.0373	.0357	.0762
1.2	275.	-15.	-.3232	.6306	.3760	.0095	.0328	.0838
1.2	280.	-15.	-.4341	.6490	.3706	.0552	.0321	.0912
1.2	285.	-15.	-.5472	.6681	.3494	.0942	.0271	.0962
1.2	290.	-15.	-.6578	.6829	.3196	.1353	.0233	.0925
1.2	295.	-15.	-.7540	.6858	.3047	.1688	.0231	.0871
1.2	300.	-15.	-.8179	.6821	.2953	.1825	.0273	.0779
1.2	305.	-15.	-.8739	.6717	.2862	.1950	.0314	.0641
1.2	310.	-15.	-.9339	.6544	.2775	.2107	.0367	.0528
1.2	315.	-15.	-.9768	.6323	.2514	.2079	.0416	.0385
1.2	320.	-15.	-1.0203	.6008	.2586	.1999	.0472	.0346
1.2	325.	-15.	-1.0907	.5801	.2575	.1947	.0516	.0310
1.2	330.	-15.	-1.0808	.5372	.2602	.1808	.0542	.0305
1.2	335.	-15.	-1.0968	.5055	.2582	.1747	.0576	.0287
1.2	340.	-15.	-1.0876	.4674	.2582	.1598	.0582	.0274
1.2	345.	-15.	-1.0607	.4284	.2569	.1443	.0595	.0246
1.2	350.	-15.	-1.0256	.3722	.2708	.1306	.0621	.0265
1.2	355.	-15.	-.9929	.3080	.2709	.1279	.0616	.0256

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_l
1.2	3.	-30.	-1.0373	.3104	.8405	.1187	.1471	.1073
1.2	5.	-30.	-1.0144	.2451	.8435	.1233	.1458	.1051
1.2	10.	-30.	-.9349	.1708	.8543	.1423	.1417	.1057
1.2	15.	-30.	-.9256	.0960	.8717	.1441	.1425	.1059
1.2	20.	-30.	-.8640	.0276	.9014	.1404	.1443	.1027
1.2	25.	-30.	-.8007	-.0565	.9491	.1486	.1374	.0999
1.2	30.	-30.	-.7347	-.1602	.9029	.1574	.1310	.0930
1.2	35.	-30.	-.6245	-.2597	.8426	.1675	.1287	.0870
1.2	40.	-30.	-.5434	-.3473	.8248	.1806	.1256	.0852
1.2	45.	-30.	-.4723	-.4254	.8272	.1897	.1251	.0885
1.2	50.	-30.	-.3924	-.4944	.7972	.1950	.1224	.0862
1.2	55.	-30.	-.3132	-.5447	.7646	.1943	.1154	.0849
1.2	60.	-30.	-.2304	-.5945	.7343	.1812	.1108	.0869
1.2	65.	-30.	-.1454	-.6324	.7147	.1732	.1075	.0865
1.2	70.	-30.	-.0630	-.6704	.6872	.1610	.1049	.0758
1.2	75.	-30.	.0343	-.7185	.6457	.1546	.0986	.0625
1.2	80.	-30.	.1105	-.7233	.6082	.1457	.0954	.0460
1.2	85.	-30.	.1840	-.7271	.5830	.1351	.0913	.0338
1.2	90.	-30.	.2711	-.7330	.5779	.1201	.0906	.0277
1.2	95.	-30.	.3444	-.7184	.5722	.1072	.0902	.0181
1.2	100.	-30.	.4147	-.6967	.5653	.0946	.0932	.0097
1.2	105.	-30.	.4494	-.6423	.5521	.0810	.0873	.0103
1.2	110.	-30.	.5213	-.6603	.5476	.0660	.0849	.0129
1.2	115.	-30.	.5722	-.6423	.5653	.0476	.0804	.0220
1.2	120.	-30.	.5931	-.7241	.7515	.0013	.0537	.0643
1.2	125.	-30.	.6860	-.7167	.7558	-.0361	.0781	.0697
1.2	130.	-30.	.7702	-.6963	.7705	-.0027	.0783	.0759
1.2	135.	-30.	.8347	-.6839	.7880	-.0433	.0750	.0798
1.2	140.	-30.	.9086	-.6522	.8323	-.1240	.0814	.0840
1.2	145.	-30.	.9571	-.5953	.8459	-.1529	.0820	.0900
1.2	150.	-30.	.9854	-.5451	.8592	-.1736	.0826	.0925
1.2	155.	-30.	1.0123	-.4443	.8682	-.1937	.0809	.0937
1.2	160.	-30.	1.0347	-.4303	.8816	-.2263	.0702	.0966
1.2	165.	-30.	1.0234	-.3565	.8429	-.2410	.0736	.0972
1.2	170.	-30.	1.0073	-.2744	.8119	-.2544	.0694	.0963
1.2	175.	-30.	.9734	-.2012	.7920	-.2705	.0635	.0992
1.2	180.	-30.	.9431	-.1402	.7669	-.2855	.0556	.1122
1.2	185.	-30.	.9236	-.0751	.7465	-.3083	.0505	.1194
1.2	190.	-30.	.9085	-.0092	.7370	-.3315	.0438	.1321
1.2	195.	-30.	.8705	.0474	.7114	-.3401	.0348	.1475
1.2	200.	-30.	.8269	.0938	.7019	-.3384	.0350	.1517
1.2	205.	-30.	.7474	.1272	.6787	-.3247	.0300	.1785
1.2	210.	-30.	.7018	.1444	.6775	-.3174	.0287	.1888
1.2	215.	-30.	.6733	.1627	.6777	-.3144	.0289	.1979
1.2	220.	-30.	.6250	.1774	.6639	-.2942	.0259	.2070
1.2	225.	-30.	.5411	.1996	.6098	-.2601	.0274	.1951
1.2	230.	-30.	.4643	.2345	.6575	-.2354	.0373	.2048
1.2	235.	-30.	.5107	.2467	.8549	-.2224	.0640	.2459
1.2	240.	-30.	.3922	.3117	.8518	-.1913	.0693	.2335
1.2	245.	-30.	.2765	.3855	.7992	-.1653	.0692	.2109
1.2	250.	-30.	.7876	.1180	.6883	-.3364	.0317	.1658
1.2	255.	-30.	.1679	.4450	.7904	-.1413	.0693	.2025
1.2	260.	-30.	.0539	.4974	.8230	-.1134	.0711	.2096
1.2	265.	-30.	-.0760	.5550	.8290	-.0807	.0733	.2113
1.2	270.	-30.	-.1984	.5882	.8020	-.0482	.0726	.2101
1.2	275.	-30.	-.3151	.6233	.7899	-.0111	.0755	.2145
1.2	280.	-30.	-.4216	.6431	.7861	.0240	.0789	.2131
1.2	285.	-30.	-.5120	.6550	.7868	.0538	.0804	.2101
1.2	290.	-30.	-.5895	.6575	.7893	.0851	.0824	.2064
1.2	295.	-30.	-.6558	.6479	.7882	.1144	.0865	.1997
1.2	300.	-30.	-.7109	.6404	.7779	.1373	.0877	.1941
1.2	305.	-30.	-.7692	.6294	.7707	.1540	.0917	.1825
1.2	310.	-30.	-.8113	.6091	.7565	.1622	.0951	.1717
1.2	315.	-30.	-.8563	.5784	.7276	.1661	.0975	.1596
1.2	320.	-30.	-.8899	.5460	.7113	.1603	.1027	.1467
1.2	325.	-30.	-.9124	.5041	.6963	.1540	.1065	.1374
1.2	330.	-30.	-.9319	.4734	.6813	.1459	.1105	.1264
1.2	335.	-30.	-.9758	.4623	.6551	.1392	.1121	.1130
1.2	340.	-30.	-.9737	.4288	.6468	.1343	.1148	.1038
1.2	345.	-30.	-.9633	.3901	.6456	.1336	.1180	.0989
1.2	350.	-30.	-.9240	.3421	.6432	.1259	.1213	.0922
1.2	355.	-30.	-.8953	.2817	.6487	.1303	.1249	.0894

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-45.	-.8170	.2910	1.2111	.0791	.1591	.1342
1.2	5.	-45.	-.8048	.2465	1.1845	.0855	.1371	.1881
1.2	10.	-45.	-.7746	.1854	1.1758	.0989	.1341	.1736
1.2	15.	-45.	-.7553	.1215	1.1565	.1043	.1775	.1741
1.2	20.	-45.	-.7327	.0575	1.1361	.1076	.1911	.1612
1.2	25.	-45.	-.6991	.0049	1.1537	.1117	.1956	.1534
1.2	30.	-45.	-.6934	-.0760	1.1459	.1228	.1703	.1444
1.2	35.	-45.	-.6537	-.1474	1.1347	.1345	.1725	.1395
1.2	40.	-45.	-.6062	-.2207	1.1110	.1334	.1559	.1334
1.2	45.	-45.	-.5750	-.2845	1.0847	.1454	.1637	.1245
1.2	50.	-45.	-.5198	-.3541	1.0527	.1555	.1619	.1287
1.2	55.	-45.	-.2342	-.4135	1.0728	.1574	.1559	.1316
1.2	60.	-45.	-.1978	-.4577	1.0433	.1548	.1506	.1298
1.2	65.	-45.	-.0819	-.4864	1.0237	.1514	.1493	.1228
1.2	70.	-45.	-.0154	-.5241	.9867	.1451	.1434	.1134
1.2	75.	-45.	.0715	-.5467	.9452	.1327	.1341	.1005
1.2	80.	-45.	.1819	-.5521	.9175	.1243	.1329	.0871
1.2	85.	-45.	.2598	-.5665	.8881	.1198	.1352	.0741
1.2	90.	-45.	.3346	-.5652	.8775	.1175	.1332	.0620
1.2	95.	-45.	.3924	-.5565	.8566	.0915	.1262	.0589
1.2	100.	-45.	.4522	-.5636	.8528	.0705	.1275	.0572
1.2	105.	-45.	.4248	-.5688	.8545	.0573	.1279	.0501
1.2	110.	-45.	.4434	-.5661	.8556	.0359	.1262	.0500
1.2	115.	-45.	.4853	-.5442	.8591	.0124	.1243	.0539
1.2	120.	-45.	.4522	-.5367	1.0728	.0096	.1224	.1101
1.2	125.	-45.	.4253	-.5364	1.0645	-.0202	.1141	.1112
1.2	130.	-45.	.3367	-.5816	1.0521	-.0474	.1136	.1114
1.2	135.	-45.	.3434	-.6019	1.0502	-.0735	.1097	.1137
1.2	140.	-45.	.2851	-.6178	1.0462	-.1009	.1036	.1176
1.2	145.	-45.	.2444	-.6405	1.0503	-.1245	.0969	.1214
1.2	150.	-45.	.2247	-.6434	1.0444	-.1434	.0920	.1282
1.2	155.	-45.	.2013	-.6715	1.0392	-.1713	.0868	.1348
1.2	160.	-45.	.1648	-.6818	1.0378	-.1921	.0825	.1391
1.2	165.	-45.	.1240	-.6994	1.0330	-.2115	.0778	.1421
1.2	170.	-45.	.0947	-.7051	1.0220	-.2359	.0725	.1480
1.2	175.	-45.	.0625	-.7178	1.0114	-.2511	.0698	.1586

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	180.	-45.	.4300	-.1059	1.0081	-.2721	.0662	.1683
1.2	185.	-45.	.8109	-.0590	1.0027	-.2825	.0621	.1774
1.2	190.	-45.	.7816	-.0019	.9890	-.2839	.0589	.1816
1.2	195.	-45.	.7511	.0383	.9823	-.2811	.0541	.1868
1.2	200.	-45.	.7177	.0749	.9779	-.2764	.0526	.1898
1.2	205.	-45.	.6876	.0937	.9769	-.2722	.0502	.2009
1.2	210.	-45.	.6520	.1133	.9720	-.2672	.0498	.2156
1.2	215.	-45.	.6130	.1299	.9729	-.2590	.0481	.2301
1.2	220.	-45.	.5681	.1478	.9702	-.2450	.0457	.2395
1.2	225.	-45.	.5173	.1620	.9586	-.2254	.0458	.2485
1.2	230.	-45.	.4620	.1863	.9546	-.2051	.0502	.2560
1.2	235.	-45.	.3939	.2225	.9579	-.1850	.0582	.2694
1.2	240.	-45.	.4809	.2087	1.1146	-.1833	.0769	.3052
1.2	245.	-45.	.3656	.2705	1.0975	-.1566	.0792	.3045
1.2	250.	-45.	.2573	.3222	1.0891	-.1296	.0820	.3030
1.2	255.	-45.	.1577	.3676	1.0910	-.1016	.0869	.3017
1.2	260.	-45.	.0698	.4059	1.0828	-.0802	.0907	.2975
1.2	265.	-45.	-.0060	.4341	1.0778	-.0601	.0947	.2972
1.2	270.	-45.	-.0913	.4621	1.0737	-.0391	.0992	.2973
1.2	275.	-45.	-.1710	.4871	1.0770	-.0211	.1040	.2968
1.2	280.	-45.	-.2559	.5084	1.0816	-.0011	.1075	.2965
1.2	285.	-45.	-.3248	.5212	1.0867	.0156	.1127	.2922
1.2	290.	-45.	-.3780	.5254	1.1015	.0316	.1209	.2887
1.2	295.	-45.	-.4391	.5250	1.1214	.0475	.1273	.2907
1.2	300.	-45.	-.4886	.5088	1.1388	.0689	.1339	.2899
1.2	305.	-45.	-.5387	.4946	1.1248	.0777	.1365	.2807
1.2	310.	-45.	-.5891	.4798	1.1090	.0833	.1391	.2698
1.2	315.	-45.	-.6333	.4577	1.0992	.0900	.1404	.2638
1.2	320.	-45.	-.6729	.4322	1.0895	.0921	.1420	.2579
1.2	325.	-45.	-.7064	.4062	1.0717	.0975	.1425	.2482
1.2	330.	-45.	-.7371	.3881	1.0582	.0996	.1453	.2358
1.2	335.	-45.	-.7632	.3684	1.0406	.1058	.1479	.2244
1.2	340.	-45.	-.7748	.3474	1.0145	.1099	.1491	.2067
1.2	345.	-45.	-.7540	.3040	1.0271	.1044	.1594	.1958
1.2	350.	-45.	-.7317	.2708	1.0124	.1025	.1613	.1859
1.2	355.	-45.	-.7137	.2341	1.0122	.1032	.1636	.1812

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS

HANDS ON ARMREST

ROCKET OFF

(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-0.	-1.2470	.3983	-.0115	.1484	-.0001	-.0042
1.5	5.	-0.	-1.2203	.2424	-.0152	.1619	.0005	-.0042
1.5	10.	-0.	-1.1381	.2147	-.0134	.1734	.0004	-.0042
1.5	15.	-0.	-1.1165	.1167	-.0170	.1855	.0005	-.0047
1.5	20.	-0.	-1.0158	-.0158	-.0162	.1857	.0013	-.0052
1.5	25.	-0.	-.9543	-.1217	-.0159	.1871	.0019	-.0055
1.5	30.	-0.	-.8184	-.2555	-.0129	.1555	.0019	-.0053
1.5	35.	-0.	-.7349	-.3257	-.0092	.1731	-.0006	-.0025
1.5	40.	-0.	-.6158	-.4266	-.0073	.1714	-.0012	-.0010
1.5	45.	-0.	-.5133	-.5155	-.0045	.1725	.0001	-.0011
1.5	50.	-0.	-.4343	-.5734	-.0052	.1645	-.0008	-.0012
1.5	55.	-0.	-.3541	-.6155	-.0041	.1613	-.0017	.0002
1.5	60.	-0.	-.2772	-.6412	-.0069	.1533	-.0024	.0009
1.5	65.	-0.	-.2140	-.6566	-.0056	.1496	-.0043	.0012
1.5	70.	-0.	-.1541	-.7266	-.0139	.1556	-.0048	-.0105
1.5	75.	-0.	-.0931	-.7516	-.0147	.1623	-.0037	-.0139
1.5	80.	-0.	.0131	-.7965	-.0108	.1687	-.0007	-.0134
1.5	85.	-0.	.1227	-.8042	-.0142	.1650	-.0007	-.0012
1.5	90.	-0.	.2012	-.8139	-.0119	.1613	-.0012	-.0021
1.5	95.	-0.	.2777	-.8319	-.0111	.1513	-.0012	-.0032
1.5	100.	-0.	.3581	-.8271	-.0252	.1349	-.0039	-.0024
1.5	105.	-0.	.4035	-.8044	-.0232	.1325	-.0046	-.0029
1.5	110.	-0.	.5078	-.8052	-.0165	.1093	-.0046	-.0012
1.5	115.	-0.	.5978	-.7942	-.0273	.0930	-.0062	-.0047
1.5	120.	-0.	.6954	-.7468	-.0351	.0744	-.0025	-.0077
1.5	125.	-0.	.7838	-.8351	-.0252	.0154	.0003	-.0001
1.5	130.	-0.	.8226	-.8244	-.0353	-.0256	-.0012	-.0033
1.5	135.	-0.	.8129	-.8002	-.0397	-.0652	-.0011	-.0101
1.5	140.	-0.	.8914	-.7866	-.0432	-.0969	-.0010	-.0106
1.5	145.	-0.	1.0570	-.7169	-.0493	-.1242	-.0020	-.0044
1.5	150.	-0.	1.1215	-.6575	-.0384	-.1531	-.0022	-.0093
1.5	155.	-0.	1.1274	-.5715	-.0352	-.1731	-.0020	-.0104
1.5	160.	-0.	1.1333	-.4855	-.0272	-.2025	-.0032	-.0096
1.5	165.	-0.	1.1394	-.3913	-.0231	-.2247	.0008	-.0044
1.5	170.	-0.	1.1259	-.2974	-.0215	-.2533	.0029	-.0047
1.5	175.	-0.	1.0302	-.2191	-.0144	-.2418	.0033	-.0046
1.5	180.	-0.	1.0546	-.1604	-.0153	-.3109	.0042	-.0082
1.5	185.	-0.	1.0252	-.1012	-.0129	-.3349	.0049	-.0075
1.5	190.	-0.	.9852	-.0383	-.0080	-.3550	.0043	-.0069
1.5	195.	-0.	.9346	.0169	-.0101	-.3682	.0043	-.0079
1.5	200.	-0.	.8795	.0679	-.0111	-.3787	.0043	-.0092
1.5	205.	-0.	.8278	.1020	-.0088	-.3799	.0047	-.0073
1.5	210.	-0.	.7856	.1351	-.0051	-.3727	.0032	-.0039
1.5	215.	-0.	.7293	.1637	-.0057	-.3586	.0024	-.0028
1.5	220.	-0.	.6729	.1943	-.0060	-.3387	.0026	-.0036
1.5	225.	-0.	.5906	.2345	-.0148	-.3093	.0014	-.0029
1.5	230.	-0.	.5049	.2613	-.0173	-.2756	.0004	-.0051
1.5	235.	-0.	.4154	.2835	-.0227	-.2349	.0044	-.0087
1.5	240.	-0.	.4471	.3089	-.0133	-.2142	-.0011	-.0082
1.5	245.	-0.	.3492	.3463	-.0136	-.1746	-.0034	-.0055
1.5	250.	-0.	.2544	.3660	-.0124	-.1326	-.0030	-.0058
1.5	255.	-0.	.1552	.3704	-.0232	-.0851	-.0025	-.0110
1.5	260.	-0.	.0643	.3929	-.0217	-.0584	-.0013	-.0110
1.5	265.	-0.	-.0404	.4552	-.0241	-.0378	-.0010	-.0142
1.5	270.	-0.	-.1561	.5050	-.0193	-.0127	-.0002	-.0148
1.5	275.	-0.	-.2534	.5376	-.0169	.0192	-.0013	-.0167
1.5	280.	-0.	-.3744	.5827	-.0175	.0503	-.0017	-.0127
1.5	285.	-0.	-.4938	.6347	-.0112	.0812	-.0003	-.0050
1.5	290.	-0.	-.5130	.6801	-.0092	.1112	-.0003	-.0013
1.5	295.	-0.	-.7402	.7048	-.0216	.1506	-.0003	-.0037
1.5	300.	-0.	-.8541	.7165	-.0198	.1880	-.0003	-.0067
1.5	305.	-0.	-.9439	.7301	-.0251	.2057	-.0015	-.0071
1.5	310.	-0.	-1.0054	.7172	-.0183	.2145	.0006	-.0079
1.5	315.	-0.	-1.0559	.6931	-.0239	.2199	.0013	-.0092
1.5	320.	-0.	-1.1079	.6599	-.0242	.2172	.0014	-.0121
1.5	325.	-0.	-1.1585	.6231	-.0277	.2085	.0010	-.0106
1.5	330.	-0.	-1.1950	.5793	-.0238	.2043	.0019	-.0092
1.5	335.	-0.	-1.2104	.5388	-.0166	.1959	.0019	-.0100
1.5	340.	-0.	-1.2034	.4965	-.0146	.1835	.0007	-.0085
1.5	345.	-0.	-1.1973	.4548	-.0081	.1705	.0001	-.0060
1.5	350.	-0.	-1.1662	.4102	-.0046	.1532	.0008	-.0046
1.5	355.	-0.	-1.1311	.3575	-.0305	.1361	-.0005	-.0110

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	[illegible]	-5.	-1.2407	.3554	.1453	.1514	.0247	.0113
1.5	9.	-5.	-1.2234	.2362	.1458	.1635	.0260	.0096
1.5	10.	-5.	-1.1355	.2142	.1456	.1747	.0279	.0098
1.5	15.	-5.	-1.0944	.1155	.1416	.1847	.0247	.0114
1.5	20.	-5.	-.9770	-.0076	.1388	.1824	.0240	.0144
1.5	25.	-5.	-.8737	-.1209	.1326	.1733	.0198	.0144
1.5	30.	-5.	-.7781	-.2349	.1330	.1641	.0215	.0151
1.5	35.	-5.	-.7033	-.3233	.1415	.1741	.0193	.0208
1.5	40.	-5.	-.6342	-.4214	.1452	.1754	.0199	.0200
1.5	45.	-5.	-.5824	-.5143	.1445	.1754	.0199	.0246
1.5	50.	-5.	-.5403	-.5975	.1543	.1780	.0228	.0246
1.5	55.	-5.	-.5092	-.5942	.1519	.1725	.0257	.0197
1.5	60.	-5.	-.4994	-.6204	.1357	.1681	.0270	.0100
1.5	65.	-5.	-.5108	-.6656	.1264	.1528	.0252	.0066
1.5	70.	-5.	-.5510	-.7053	.1252	.1548	.0279	.0093
1.5	75.	-5.	-.6542	-.7446	.1151	.1553	.0212	.0130
1.5	80.	-5.	.0217	-.7785	.1334	.1601	.0214	.0156
1.5	85.	-5.	.1177	-.8065	.1453	.1674	.0185	.0194
1.5	90.	-5.	.2122	-.8128	.1355	.1632	.0122	.0148
1.5	95.	-5.	.2773	-.8291	.1556	.1542	.0108	.0138
1.5	100.	-5.	.3463	-.8184	.1327	.1405	.0102	.0059
1.5	105.	-5.	.4153	-.8081	.1360	.1201	.0080	.0104
1.5	110.	-5.	.4819	-.7991	.1327	.1079	.0078	.0068
1.5	115.	-5.	.5536	-.7737	.1274	.0932	.0076	.0112
1.5	120.	-5.	.6437	-.9446	.1136	.0401	.0110	.0074
1.5	125.	-5.	.7284	-.8524	.1172	.0073	.0129	.0101
1.5	130.	-5.	.8273	-.8186	.1254	-.0336	.0151	.0113
1.5	135.	-5.	.4121	-.7936	.1349	-.0632	.0163	.0159
1.5	140.	-5.	.4979	-.7809	.1423	-.1002	.0198	.0108
1.5	145.	-5.	1.0908	-.7104	.1472	-.1345	.0214	.0154
1.5	150.	-5.	1.1048	-.6473	.1452	-.1697	.0204	.0092
1.5	155.	-5.	1.1534	-.5784	.1398	-.1824	.0195	.0146
1.5	160.	-5.	1.1419	-.4936	.1401	-.2056	.0200	.0146
1.5	165.	-5.	1.1394	-.3434	.1417	-.2336	.0184	.0172
1.5	170.	-5.	1.0913	-.2474	.1347	-.2645	.0165	.0091
1.5	175.	-5.	1.0913	-.2267	.1315	-.2360	.0158	.0105

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	180.	-5.	1.0576	-.1582	.1341	-.3107	.0144	.0164
1.5	185.	-5.	1.0254	-.0932	.1516	-.3344	.0160	.0283
1.5	190.	-5.	.9838	-.0392	.1616	-.3526	.0180	.0225
1.5	195.	-5.	.9375	.0169	.1642	-.3664	.0166	.0255
1.5	200.	-5.	.8787	.0730	.1628	-.3754	.0151	.0285
1.5	205.	-5.	.8303	.1033	.1561	-.3775	.0132	.0344
1.5	210.	-5.	.7867	.1352	.1608	-.3720	.0093	.0424
1.5	215.	-5.	.7325	.1584	.1546	-.3583	.0059	.0494
1.5	220.	-5.	.6710	.1886	.1505	-.3409	.0030	.0558
1.5	225.	-5.	.5896	.2152	.1279	-.3110	-.0004	.0561
1.5	230.	-5.	.5126	.2402	.1083	-.2765	-.0011	.0493
1.5	235.	-5.	.4245	.2591	.0939	-.2374	-.0010	.0454
1.5	240.	-5.	.4477	.2983	.1321	-.2141	.0041	.0340
1.5	245.	-5.	.3504	.3468	.1207	-.1757	.0062	.0242
1.5	250.	-5.	.2686	.3788	.1172	-.1408	.0099	.0137
1.5	255.	-5.	.1542	.3933	.1085	-.0986	.0133	.0076
1.5	260.	-5.	.0563	.4269	.1019	-.0780	.0149	-.0008
1.5	265.	-5.	-.0448	.4721	.1197	-.0528	.0170	.0015
1.5	270.	-5.	-.1589	.5263	.1324	-.0243	.0190	.0068
1.5	275.	-5.	-.2770	.5820	.1326	.0010	.0173	.0136
1.5	280.	-5.	-.4054	.6363	.1320	.0410	.0150	.0172
1.5	285.	-5.	-.5099	.6750	.1293	.0702	.0128	.0171
1.5	290.	-5.	-.6449	.7081	.1255	.1165	.0084	.0204
1.5	295.	-5.	-.7530	.7142	.1076	.1535	.0077	.0242
1.5	300.	-5.	-.8487	.7228	.0965	.1809	.0097	.0235
1.5	305.	-5.	-.9360	.7322	.0690	.2012	.0101	.0203
1.5	310.	-5.	-1.0002	.7207	.0926	.2106	.0175	.0136
1.5	315.	-5.	-1.0612	.6970	.0948	.2174	.0201	.0103
1.5	320.	-5.	-1.0978	.6554	.0839	.2159	.0205	.0055
1.5	325.	-5.	-1.1459	.6146	.0868	.2101	.0219	.0062
1.5	330.	-5.	-1.1862	.5735	.0910	.2033	.0229	.0068
1.5	335.	-5.	-1.2024	.5390	.1005	.1932	.0237	.0050
1.5	340.	-5.	-1.2101	.5055	.1045	.1812	.0236	.0067
1.5	345.	-5.	-1.2033	.4734	.0947	.1677	.0225	.0051
1.5	350.	-5.	-1.1719	.4199	.0848	.1510	.0211	.0031
1.5	355.	-5.	-1.1273	.3615	.0854	.1355	.0230	.0046

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-10.	-1.2246	.3519	.3323	.1515	.0543	.0468
1.5	5.	-10.	-1.1970	.2444	.3322	.1575	.0538	.0452
1.5	10.	-10.	-1.1594	.2314	.3372	.1713	.0514	.0436
1.5	15.	-10.	-1.0965	.1853	.3395	.1827	.0467	.0441
1.5	20.	-10.	-.9859	.0885	.2967	.1804	.0441	.0305
1.5	25.	-10.	-.8354	-.1169	.2882	.1831	.0407	.0317
1.5	30.	-10.	-.7442	-.2251	.2850	.1871	.0378	.0353
1.5	35.	-10.	-.7034	-.3346	.2887	.1873	.0435	.0345
1.5	40.	-10.	-.6372	-.4306	.2939	.1819	.0418	.0383
1.5	45.	-10.	-.5273	-.5169	.2954	.1831	.0400	.0404
1.5	50.	-10.	-.4488	-.5873	.2904	.1859	.0414	.0476
1.5	55.	-10.	-.3736	-.6881	.2864	.1794	.0457	.0388
1.5	60.	-10.	-.2898	-.6834	.2593	.1684	.0478	.0342
1.5	65.	-10.	-.2002	-.6480	.2859	.1641	.0455	.0394
1.5	70.	-10.	-.1323	-.6755	.2307	.1582	.0441	.0108
1.5	75.	-10.	-.0281	-.7309	.2146	.1527	.0375	.0257
1.5	80.	-10.	.0535	-.7945	.2059	.1604	.0381	.0297
1.5	85.	-10.	.1250	-.8175	.1965	.1651	.0384	.0217
1.5	90.	-10.	.2139	-.8331	.1720	.1579	.0308	.0132
1.5	95.	-10.	.2951	-.8334	.1513	.1457	.0251	.0099
1.5	100.	-10.	.3617	-.8217	.1604	.1339	.0234	.0147
1.5	105.	-10.	.4364	-.8585	.1558	.1176	.0207	.0088
1.5	110.	-10.	.5034	-.7881	.1543	.1015	.0167	.0081
1.5	115.	-10.	.5663	-.7578	.1189	.0873	.0093	.0104
1.5	120.	-10.	.5456	-.6355	.2305	.0283	.0219	.0230
1.5	125.	-10.	.7459	-.6287	.2573	-.0007	.0262	.0244
1.5	130.	-10.	.8335	-.5159	.2350	-.0424	.0319	.0254
1.5	135.	-10.	.9137	-.7935	.2978	-.0781	.0348	.0240
1.5	140.	-10.	.9865	-.7434	.3307	-.1366	.0358	.0241
1.5	145.	-10.	1.0457	-.7025	.3102	-.1380	.0379	.0231
1.5	150.	-10.	1.0928	-.6413	.3124	-.1641	.0391	.0221
1.5	155.	-10.	1.1239	-.5774	.3118	-.1893	.0378	.0216
1.5	160.	-10.	1.1347	-.4971	.3046	-.2064	.0344	.0237
1.5	165.	-10.	1.1223	-.3815	.2948	-.2394	.0323	.0251
1.5	170.	-10.	1.1134	-.2966	.2817	-.2736	.0292	.0240
1.5	175.	-10.	1.0933	-.2313	.2838	-.2907	.0286	.0312
1.5	180.	-10.	1.0704	-.1578	.2897	-.3147	.0255	.0406
1.5	185.	-10.	1.0276	-.0854	.2972	-.3332	.0266	.0453
1.5	190.	-10.	.9787	-.0114	.3164	-.3490	.0287	.0503
1.5	195.	-10.	.9333	.0552	.3211	-.3635	.0275	.0565
1.5	200.	-10.	.8914	.0805	.3142	-.3772	.0228	.0640
1.5	205.	-10.	.8521	.1113	.3078	-.3803	.0180	.0742
1.5	210.	-10.	.7993	.1421	.3126	-.3720	.0142	.0860
1.5	215.	-10.	.7346	.1689	.3023	-.3587	.0098	.0940
1.5	220.	-10.	.6657	.1907	.2837	-.3362	.0058	.1004
1.5	225.	-10.	.5892	.2173	.2597	-.3050	.0023	.1018
1.5	230.	-10.	.5156	.2424	.2398	-.2767	.0017	.0988
1.5	235.	-10.	.4391	.2685	.2131	-.2402	.0023	.0877
1.5	240.	-10.	.4651	.2916	.2763	-.2150	.0117	.0762
1.5	245.	-10.	.3628	.3402	.2739	-.1793	.0202	.0611
1.5	250.	-10.	.2546	.3869	.2546	-.1444	.0255	.0451
1.5	255.	-10.	.1557	.4278	.2472	-.1175	.0295	.0353
1.5	260.	-10.	.0489	.4677	.2453	-.0987	.0330	.0257
1.5	265.	-10.	-.0622	.5241	.2608	-.0764	.0345	.0261
1.5	270.	-10.	-.1721	.5693	.2741	-.0411	.0349	.0327
1.5	275.	-10.	-.2831	.6118	.2816	-.0057	.0339	.0397
1.5	280.	-10.	-.4035	.6561	.2852	.0283	.0300	.0487
1.5	285.	-10.	-.5226	.6893	.2727	.0623	.0236	.0546
1.5	290.	-10.	-.6521	.7152	.2567	.1057	.0178	.0594
1.5	295.	-10.	-.7568	.7198	.2382	.1470	.0159	.0619
1.5	300.	-10.	-.8523	.7268	.2235	.1757	.0192	.0567
1.5	305.	-10.	-.9348	.7295	.2066	.1978	.0234	.0480
1.5	310.	-10.	-1.0036	.7220	.2156	.2140	.0325	.0380
1.5	315.	-10.	-1.0624	.7003	.2106	.2181	.0372	.0315
1.5	320.	-10.	-1.1108	.6693	.2039	.2128	.0406	.0256
1.5	325.	-10.	-1.1507	.6276	.2013	.2045	.0423	.0207
1.5	330.	-10.	-1.1730	.5760	.2046	.1986	.0436	.0213
1.5	335.	-10.	-1.1919	.5420	.2133	.1895	.0439	.0233
1.5	340.	-10.	-1.2027	.5095	.2160	.1791	.0460	.0221
1.5	345.	-10.	-1.1867	.4733	.2152	.1624	.0462	.0206
1.5	350.	-10.	-1.1595	.4158	.2136	.1522	.0460	.0181
1.5	355.	-10.	-1.1051	.3594	.2106	.1319	.0465	.0187

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-15.	-1.2132	.3523	.4808	.1493	.0821	.0638
1.5	5.	-15.	-1.1334	.2733	.4848	.1545	.0802	.0630
1.5	10.	-15.	-1.1452	.1868	.4936	.1737	.0755	.0625
1.5	15.	-15.	-1.0812	.0773	.4925	.1895	.0710	.0628
1.5	20.	-15.	-.9916	-.0142	.4457	.1951	.0691	.0439
1.5	25.	-15.	-.8375	-.1253	.4447	.1969	.0662	.0483
1.5	30.	-15.	-.7845	-.2234	.4499	.1917	.0642	.0493
1.5	35.	-15.	-.6932	-.3199	.4344	.1845	.0622	.0464
1.5	40.	-15.	-.6117	-.4182	.4354	.1823	.0616	.0572
1.5	45.	-15.	-.5343	-.5012	.4304	.1871	.0620	.0643
1.5	50.	-15.	-.4540	-.5533	.4249	.1895	.0621	.0637
1.5	55.	-15.	-.3845	-.5747	.4163	.1854	.0637	.0548
1.5	60.	-15.	-.3305	-.5747	.3928	.1687	.0617	.0405
1.5	65.	-15.	-.1857	-.5193	.3727	.1577	.0569	.0393
1.5	70.	-15.	-.1151	-.5603	.3715	.1551	.0586	.0437
1.5	75.	-15.	-.0304	-.7174	.3449	.1525	.0550	.0392
1.5	80.	-15.	.0625	-.7761	.3291	.1538	.0567	.0348
1.5	85.	-15.	.1455	-.8164	.3156	.1564	.0549	.0314
1.5	90.	-15.	.2248	-.8384	.2974	.1546	.0478	.0239
1.5	95.	-15.	.3116	-.8319	.2639	.1413	.0373	.0203
1.5	100.	-15.	.3934	-.8153	.2795	.1240	.0371	.0134
1.5	105.	-15.	.4722	-.8045	.2748	.1082	.0369	.0149
1.5	110.	-15.	.5258	-.7760	.2754	.0920	.0344	.0178
1.5	115.	-15.	.5928	-.7514	.2514	.0759	.0285	.0163
1.5	120.	-15.	.6427	-.6174	.3614	.0205	.0342	.0338
1.5	125.	-15.	.7331	-.6142	.3956	-.0137	.0378	.0384
1.5	130.	-15.	.8249	-.8034	.4342	-.0474	.0448	.0423
1.5	135.	-15.	.9024	-.7306	.4524	-.0739	.0494	.0430
1.5	140.	-15.	.9727	-.7351	.4585	-.1129	.0521	.0401
1.5	145.	-15.	1.0347	-.6983	.4731	-.1438	.0550	.0405
1.5	150.	-15.	1.0735	-.6397	.4895	-.1670	.0556	.0419
1.5	155.	-15.	1.1101	-.5587	.4853	-.1955	.0543	.0408
1.5	160.	-15.	1.1174	-.4694	.4833	-.2130	.0497	.0400
1.5	165.	-15.	1.1132	-.3672	.4524	-.2401	.0405	.0418
1.5	170.	-15.	1.1038	-.2761	.4488	-.2703	.0445	.0455
1.5	175.	-15.	1.0917	-.2332	.4450	-.2964	.0483	.0568
1.5	180.	-15.	1.0627	-.1451	.4470	-.3164	.0399	.0621
1.5	185.	-15.	1.0383	-.0884	.4578	-.3339	.0383	.0704
1.5	190.	-15.	.9915	-.0145	.4626	-.3473	.0375	.0751
1.5	195.	-15.	.9410	.0423	.4676	-.3622	.0353	.0832
1.5	200.	-15.	.9001	.0861	.4683	-.3735	.0297	.1000
1.5	205.	-15.	.8684	.1197	.4612	-.3791	.0241	.1149
1.5	210.	-15.	.8175	.1498	.4584	-.3742	.0202	.1268
1.5	215.	-15.	.7469	.1704	.4444	-.3608	.0143	.1365
1.5	220.	-15.	.6735	.1888	.4259	-.3395	.0106	.1466
1.5	225.	-15.	.6111	.2169	.4035	-.3120	.0100	.1449
1.5	230.	-15.	.5437	.2634	.3786	-.2826	.0117	.1356
1.5	235.	-15.	.4663	.2886	.3384	-.2454	.0127	.1219
1.5	240.	-15.	.4781	.2845	.4287	-.2185	.0233	.1176
1.5	245.	-15.	.3698	.3378	.4277	-.1843	.0328	.1023
1.5	250.	-15.	.2656	.3978	.4105	-.1557	.0422	.0856
1.5	255.	-15.	.1605	.4503	.3913	-.1358	.0438	.0726
1.5	260.	-15.	.0492	.5046	.3944	-.1158	.0462	.0654
1.5	265.	-15.	-.0631	.5434	.4018	-.0863	.0464	.0679
1.5	270.	-15.	-.1855	.6103	.4159	-.0527	.0482	.0678
1.5	275.	-15.	-.2867	.6397	.4070	-.0198	.0469	.0733
1.5	280.	-15.	-.4082	.6883	.4159	.0230	.0434	.0800
1.5	285.	-15.	-.5119	.7051	.4172	.0492	.0399	.0869
1.5	290.	-15.	-.6485	.7203	.3940	.0964	.0318	.0968
1.5	295.	-15.	-.7468	.7227	.3671	.1299	.0284	.0983
1.5	300.	-15.	-.8277	.7242	.3455	.1587	.0299	.0927
1.5	305.	-15.	-.9259	.7268	.3469	.1980	.0390	.0756
1.5	310.	-15.	-.9805	.7193	.3539	.2057	.0474	.0679
1.5	315.	-15.	-1.0557	.6928	.3539	.2149	.0537	.0598
1.5	320.	-15.	-1.1072	.6894	.3466	.2131	.0585	.0542
1.5	325.	-15.	-1.1490	.6278	.3434	.2065	.0641	.0444
1.5	330.	-15.	-1.1640	.5794	.3436	.1946	.0661	.0436
1.5	335.	-15.	-1.1856	.5491	.3365	.1841	.0676	.0393
1.5	340.	-15.	-1.1836	.5087	.3419	.1738	.0686	.0392
1.5	345.	-15.	-1.1650	.4581	.3357	.1633	.0692	.0365
1.5	350.	-15.	-1.1315	.4089	.3410	.1505	.0704	.0367
1.5	355.	-15.	-1.0858	.3639	.3336	.1369	.0691	.0356

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-30.	-1.1290	.3259	.9916	.1492	.1516	.1207
1.5	5.	-30.	-1.0971	.2578	.9016	.1527	.1492	.1214
1.5	10.	-30.	-1.0552	.1793	.9122	.1577	.1462	.1220
1.5	15.	-30.	-.9934	.1021	.9241	.1619	.1419	.1246
1.5	20.	-30.	-.9334	.0214	.9296	.1631	.1379	.1261
1.5	25.	-30.	-.8443	-.0508	.9149	.1644	.1336	.1242
1.5	30.	-30.	-.7536	-.1253	.9102	.1639	.1258	.1259
1.5	35.	-30.	-.6942	-.2001	.8901	.1706	.1284	.1165
1.5	40.	-30.	-.6219	-.2825	.8754	.1850	.1248	.1145
1.5	45.	-30.	-.5423	-.4267	.8448	.1836	.1211	.1193
1.5	50.	-30.	-.4613	-.4965	.8339	.1854	.1174	.1051
1.5	55.	-30.	-.3824	-.5141	.8105	.1814	.1152	.1009
1.5	60.	-30.	-.2984	-.5684	.8035	.1743	.1104	.0956
1.5	65.	-30.	-.1394	-.6422	.7911	.1794	.1141	.0998
1.5	70.	-30.	-.1056	-.6499	.7923	.1629	.1105	.0804
1.5	75.	-30.	-.0124	-.7322	.7241	.1545	.1044	.0727
1.5	80.	-30.	.0814	-.7945	.7005	.1517	.1005	.0621
1.5	85.	-30.	.1945	-.7737	.6857	.1437	.1039	.0564
1.5	90.	-30.	.2914	-.7779	.6814	.1273	.1001	.0514
1.5	95.	-30.	.3442	-.7744	.6845	.1127	.1041	.0434
1.5	100.	-30.	.4171	-.7633	.6808	.0943	.0995	.0402
1.5	105.	-30.	.4713	-.7579	.6663	.0810	.0879	.0322
1.5	110.	-30.	.5214	-.7143	.6517	.0634	.0764	.0274
1.5	115.	-30.	.5512	-.6949	.6575	.0594	.0921	.0234
1.5	120.	-30.	.5137	-.7715	.7637	.0037	.0855	.0095
1.5	125.	-30.	.4755	-.7475	.7026	-.0334	.0806	.0704
1.5	130.	-30.	.4744	-.7366	.6133	-.0674	.0879	.0446
1.5	135.	-30.	.4363	-.6977	.5349	-.0936	.0870	.0407
1.5	140.	-30.	.3158	-.6958	.4790	-.1306	.0963	.0473
1.5	145.	-30.	.2632	-.6224	.4359	-.1584	.0932	.0318
1.5	150.	-30.	.1873	-.5727	.4151	-.1833	.0963	.0349
1.5	155.	-30.	.1371	-.5165	.4230	-.2091	.0991	.0294
1.5	160.	-30.	.0471	-.4791	.4169	-.2282	.0902	.0292
1.5	165.	-30.	.0015	-.3814	.4073	-.2514	.0838	.0154
1.5	170.	-30.	.0017	-.2997	.4034	-.2727	.0759	.0130
1.5	175.	-30.	.0046	-.2134	.4050	-.2945	.0706	.0245
1.5	180.	-30.	.0167	-.1520	.8522	-.3042	.0651	.0314
1.5	185.	-30.	.9935	-.0822	.8337	-.3231	.0558	.0433
1.5	190.	-30.	.9624	-.0130	.8169	-.3365	.0492	.0536
1.5	195.	-30.	.9342	.0425	.8120	-.3466	.0442	.0665
1.5	200.	-30.	.9005	.0896	.8142	-.3530	.0423	.0770
1.5	205.	-30.	.8557	.1353	.8119	-.3539	.0417	.0873
1.5	210.	-30.	.8021	.1685	.8020	-.3492	.0423	.0976
1.5	215.	-30.	.7576	.1920	.7961	-.3387	.0415	.2072
1.5	220.	-30.	.7062	.2174	.7873	-.3250	.0407	.2179
1.5	225.	-30.	.6403	.2351	.7722	-.3025	.0409	.2270
1.5	230.	-30.	.5578	.2531	.7322	-.2746	.0421	.2197
1.5	235.	-30.	.4728	.2823	.7237	-.2434	.0455	.2182
1.5	240.	-30.	.4937	.2793	.8506	-.2173	.0659	.2359
1.5	245.	-30.	.3899	.3373	.8449	-.1885	.0721	.2251
1.5	250.	-30.	.2918	.4026	.8215	-.1700	.0759	.2068
1.5	255.	-30.	.1870	.4583	.8278	-.1484	.0767	.2012
1.5	260.	-30.	.0691	.5145	.8359	-.1215	.0771	.2009
1.5	265.	-30.	-.0400	.5693	.8490	-.1011	.0796	.2022
1.5	270.	-30.	-.1594	.6147	.8257	-.0737	.0808	.1974
1.5	275.	-30.	-.2774	.6581	.8140	-.0458	.0835	.1975
1.5	280.	-30.	-.3876	.6817	.8200	-.0116	.0850	.2025
1.5	285.	-30.	-.4744	.6941	.8218	.0136	.0875	.2022
1.5	290.	-30.	-.5820	.7035	.8536	.0543	.0919	.2083
1.5	295.	-30.	-.6494	.7027	.8551	.0792	.0931	.2077
1.5	300.	-30.	-.7333	.7008	.8721	.1110	.0968	.2082
1.5	305.	-30.	-.7925	.6843	.8609	.1302	.0999	.2015
1.5	310.	-30.	-.8603	.6649	.8575	.1524	.1041	.1957
1.5	315.	-30.	-.9158	.6328	.8443	.1633	.1090	.1859
1.5	320.	-30.	-.9667	.6004	.8284	.1649	.1159	.1726
1.5	325.	-30.	-1.0019	.5636	.8102	.1628	.1205	.1621
1.5	330.	-30.	-1.0183	.5254	.7980	.1505	.1260	.1500
1.5	335.	-30.	-1.0414	.4936	.7832	.1492	.1285	.1404
1.5	340.	-30.	-1.0409	.4586	.7735	.1421	.1320	.1303
1.5	345.	-30.	-1.0336	.4199	.7621	.1391	.1338	.1216
1.5	350.	-30.	-1.0101	.3677	.7537	.1409	.1349	.1186
1.5	355.	-30.	-.9831	.3079	.7482	.1426	.1357	.1156

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET OFF
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-45.	-.5838	.2897	1.2701	.0985	.1974	.2087
1.5	5.	-45.	-.4380	.2405	1.2705	.1049	.1963	.2064
1.5	10.	-45.	-.3718	.1804	1.2640	.1236	.1965	.2044
1.5	15.	-45.	-.4408	.1162	1.2508	.1332	.1841	.2003
1.5	20.	-45.	-.7834	.0435	1.2474	.1301	.1454	.1924
1.5	25.	-45.	-.7240	-.0124	1.2363	.1355	.1841	.1829
1.5	30.	-45.	-.6598	-.0824	1.2331	.1417	.1311	.1750
1.5	35.	-45.	-.5962	-.1555	1.2233	.1499	.1782	.1703
1.5	40.	-45.	-.5237	-.2233	1.2007	.1548	.1730	.1659
1.5	45.	-45.	-.4516	-.2880	1.1696	.1555	.1680	.1566
1.5	50.	-45.	-.3755	-.3517	1.1506	.1555	.1642	.1500
1.5	55.	-45.	-.2997	-.4163	1.1455	.1541	.1515	.1509
1.5	60.	-45.	-.2241	-.4826	1.1321	.1550	.1568	.1442
1.5	65.	-45.	-.1554	-.5379	1.1120	.1544	.1558	.1362
1.5	70.	-45.	-.0718	-.5451	1.0917	.1433	.1528	.1284
1.5	75.	-45.	.0073	-.5750	1.0553	.1417	.1453	.1143
1.5	80.	-45.	.0773	-.5995	1.0407	.1352	.1452	.1056
1.5	85.	-45.	.1438	-.6136	1.0295	.1244	.1401	.0916
1.5	90.	-45.	.2244	-.6235	1.0172	.1135	.1430	.0821
1.5	95.	-45.	.2939	-.6189	.9860	.0987	.1416	.0734
1.5	100.	-45.	.3452	-.6143	.9588	.0853	.1364	.0667
1.5	105.	-45.	.4015	-.5962	.9441	.0665	.1351	.0622
1.5	110.	-45.	.4500	-.5879	.9451	.0531	.1341	.0582
1.5	115.	-45.	.5137	-.5723	.9347	.0295	.1297	.0583
1.5	120.	-45.	.4744	-.6462	1.0905	.0131	.1221	.1393
1.5	125.	-45.	.5435	-.6234	1.0996	-.0124	.1199	.1135
1.5	130.	-45.	.6127	-.6006	1.1141	-.0431	.1189	.1214
1.5	135.	-45.	.6871	-.5845	1.1277	-.0685	.1167	.1297
1.5	140.	-45.	.7243	-.5486	1.1372	-.1002	.1125	.1377
1.5	145.	-45.	.7845	-.4995	1.1647	-.1383	.1097	.1434
1.5	150.	-45.	.8137	-.4554	1.1565	-.1562	.1043	.1513
1.5	155.	-45.	.8459	-.4367	1.1656	-.1815	.0995	.1590
1.5	160.	-45.	.8644	-.3501	1.1697	-.2036	.0960	.1654
1.5	165.	-45.	.9759	-.2920	1.1640	-.2204	.0920	.1733
1.5	170.	-45.	.8955	-.2314	1.1601	-.2408	.0867	.1812
1.5	175.	-45.	.8826	-.1819	1.1459	-.2559	.0828	.1900
1.5	180.	-45.	.8730	-.1153	1.1344	-.2748	.0766	.2006
1.5	185.	-45.	.8545	-.0687	1.1250	-.2842	.0725	.2094
1.5	190.	-45.	.8363	-.0201	1.1235	-.2931	.0701	.2204
1.5	195.	-45.	.8156	.0288	1.1203	-.2982	.0681	.2298
1.5	200.	-45.	.7834	.0764	1.1119	-.2976	.0656	.2389
1.5	205.	-45.	.7380	.1254	1.0741	-.2900	.0617	.2387
1.5	210.	-45.	.6989	.1545	1.0524	-.2802	.0598	.2460
1.5	215.	-45.	.6504	.1712	1.0427	-.2704	.0590	.2566
1.5	220.	-45.	.5972	.1953	1.0356	-.2584	.0597	.2643
1.5	225.	-45.	.5369	.2075	1.0215	-.2390	.0584	.2718
1.5	230.	-45.	.4687	.2244	1.0129	-.2139	.0591	.2775
1.5	235.	-45.	.3819	.2536	1.0084	-.1825	.0608	.2812
1.5	240.	-45.	.4460	.2622	1.1691	-.1846	.0822	.3128
1.5	245.	-45.	.3426	.3143	1.1654	-.1582	.0874	.3087
1.5	250.	-45.	.2590	.3567	1.1756	-.1375	.0922	.3101
1.5	255.	-45.	.1704	.3971	1.1691	-.1160	.0958	.3071
1.5	260.	-45.	.0862	.4361	1.1739	-.0952	.1000	.3084
1.5	265.	-45.	-.0018	.4779	1.1742	-.0762	.1039	.3104
1.5	270.	-45.	-.0900	.5168	1.1775	-.0582	.1071	.3158
1.5	275.	-45.	-.1739	.5432	1.1837	-.0394	.1109	.3179
1.5	280.	-45.	-.2487	.5600	1.1796	-.0228	.1147	.3147
1.5	285.	-45.	-.3338	.5765	1.2017	-.0002	.1225	.3158
1.5	290.	-45.	-.3992	.5824	1.2188	.0162	.1306	.3131
1.5	295.	-45.	-.4630	.5814	1.2370	.0343	.1390	.3105
1.5	300.	-45.	-.5323	.5826	1.2406	.0488	.1430	.3083
1.5	305.	-45.	-.6028	.5634	1.2600	.0722	.1513	.3059
1.5	310.	-45.	-.6524	.5437	1.2559	.0823	.1554	.2999
1.5	315.	-45.	-.6960	.5218	1.2392	.0896	.1591	.2895
1.5	320.	-45.	-.7328	.4882	1.2158	.0979	.1596	.2797
1.5	325.	-45.	-.7731	.4582	1.1954	.1065	.1585	.2725
1.5	330.	-45.	-.8053	.4349	1.1713	.1113	.1593	.2620
1.5	335.	-45.	-.8213	.4094	1.1488	.1125	.1611	.2478
1.5	340.	-45.	-.8274	.3776	1.1297	.1167	.1635	.2347
1.5	345.	-45.	-.8273	.3473	1.1124	.1167	.1657	.2210
1.5	350.	-45.	-.8083	.3075	1.1100	.1129	.1750	.2079
1.5	355.	-45.	-.7859	.2546	1.0786	.1173	.1714	.1989

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	1.	-0.	-.3224	.3280	-.0018	.0623	.0045	.0024
.6	5.	-0.	-.9015	.2414	.0034	.0726	.0040	.0049
.6	10.	-0.	-.8549	.1735	0.0000	.0792	.0036	.0039
.6	15.	-0.	-.8125	.0905	0.0000	.0844	.0029	.0027
.6	20.	-0.	-.7466	-.0054	-.0079	.0881	.0009	.0070
.6	25.	-0.	-.6845	-.1108	-.0139	.0933	.0011	.0050
.6	30.	-0.	-.6309	-.2067	.0157	.0930	.0020	.0093
.6	35.	-0.	-.5843	-.2977	.0362	.1054	.0028	.0149
.6	40.	-0.	-.5437	-.3557	.0323	.1186	.0032	.0143
.6	45.	-0.	-.4547	-.4188	.0347	.1217	.0044	.0104
.6	50.	-0.	-.4042	-.4775	.0308	.1332	.0012	-.0019
.6	55.	-0.	-.3818	-.5303	-.0032	.1638	.0022	-.0078
.6	60.	-0.	-.3601	-.5587	.0100	.1901	.0045	-.0056
.6	65.	-0.	-.3367	-.5832	.0103	.2028	.0013	-.0029
.6	70.	-0.	-.2705	-.6057	.0048	.2230	-.0004	-.0013
.6	75.	-0.	-.1428	-.6253	-.0053	.2304	-.0035	-.0023
.6	80.	-0.	.0237	-.6696	-.0051	.2123	-.0009	-.0013
.6	85.	-0.	.1004	-.6207	-.0161	.1884	-.0017	-.0009
.6	90.	-0.	.0453	-.5972	-.0371	.1737	-.0067	.0020
.6	95.	-0.	.0389	-.5734	-.1016	.1661	-.0190	.0016
.6	100.	-0.	.0452	-.5594	-.0958	.1645	-.0197	.0018
.6	105.	-0.	.0672	-.5631	-.0462	.1653	-.0109	.0019
.6	110.	-0.	.1049	-.5624	-.0392	.1591	-.0077	.0006
.6	115.	-0.	.1697	-.5559	-.0343	.1350	-.0054	-.0003
.6	120.	-0.	.3333	-.6117	.0513	.0847	.0009	-.0065
.6	125.	-0.	.3374	-.6107	.0639	.0703	.0089	-.0065
.6	130.	-0.	.4521	-.6224	-.0060	.0577	-.0019	-.0037
.6	135.	-0.	.4691	-.6022	-.0155	.0472	-.0021	-.0029
.6	140.	-0.	.4621	-.5345	-.0399	.0481	-.0027	-.0046
.6	145.	-0.	.4405	-.3972	-.0339	-.0093	-.0021	-.0034
.6	150.	-0.	.4849	-.2754	-.0292	-.0942	-.0021	-.0048
.6	155.	-0.	.5091	-.2163	-.0312	-.1833	-.0005	-.0059
.6	160.	-0.	.5440	-.1731	-.0298	-.2205	-.0005	-.0064
.6	165.	-0.	.6375	-.1323	-.0164	-.2373	.0015	-.0088
.6	170.	-0.	.6330	-.0963	-.0139	-.2479	.0024	-.0123
.6	175.	-0.	.6514	-.0453	-.0243	-.2538	.0050	-.0218
.6	180.	-0.	.6117	-.0072	-.0130	-.2619	.0051	-.0179
.6	185.	-0.	.5603	.0293	-.0232	-.2730	.0060	-.0237
.6	190.	-0.	.5351	.0068	-.0156	-.2939	.0022	-.0141
.6	195.	-0.	.5478	-.0161	-.0342	-.3143	.0055	-.0274
.6	200.	-0.	.5477	-.0231	-.0295	-.3276	.0070	-.0277
.6	205.	-0.	.5609	-.0182	-.0292	-.3416	.0045	-.0224
.6	210.	-0.	.5507	.0286	-.0177	-.3494	.0060	-.0132
.6	215.	-0.	.5346	.0722	-.0103	-.3520	.0065	-.0037
.6	220.	-0.	.5060	.1348	.0026	-.3477	.0048	.0016
.6	225.	-0.	.4673	.2281	.0045	-.3446	.0012	.0075
.6	230.	-0.	.4167	.3134	-.0007	-.3380	.0017	.0013
.6	235.	-0.	.3445	.3976	-.0153	-.2980	.0048	-.0059
.6	240.	-0.	.3381	.2717	.0038	-.2245	.0038	-.0211
.6	245.	-0.	.2715	.3271	.0029	-.1833	-.0048	-.0068
.6	250.	-0.	.2101	.3375	.0070	-.1483	-.0026	-.0025
.6	255.	-0.	.1353	.3560	.0069	-.1022	-.0035	.0038
.6	260.	-0.	.0427	.3634	-.0012	-.0707	-.0024	-.0073
.6	265.	-0.	-.0562	.3998	-.0025	-.0300	-.0024	-.0052
.6	270.	-0.	-.1953	.4337	-.0095	.0204	-.0042	-.0030
.6	275.	-0.	-.2801	.4576	-.0090	.0661	-.0041	-.0032
.6	280.	-0.	-.3543	.4703	.0079	.1032	-.0089	.0022
.6	285.	-0.	-.4134	.4564	.0099	.1396	.0009	.0022
.6	290.	-0.	-.4792	.4491	.0461	.1689	.0084	.0055
.6	295.	-0.	-.5450	.4746	-.0131	.1736	.0004	-.0006
.6	300.	-0.	-.6312	.4897	-.0352	.1844	-.0041	-.0047
.6	305.	-0.	-.7186	.4907	-.0686	.1957	-.0063	-.0120
.6	310.	-0.	-.7775	.4997	-.0619	.2010	-.0068	-.0080
.6	315.	-0.	-.8430	.4646	-.0352	.2157	-.0023	-.0064
.6	320.	-0.	-.9014	.4396	-.0481	.2147	-.0022	-.0095
.6	325.	-0.	-.9408	.4408	-.0354	.2005	-.0019	-.0033
.6	330.	-0.	-.9600	.4317	-.0130	.1824	.0024	-.0011
.6	335.	-0.	-.9650	.4019	.0142	.1649	.0030	.0055
.6	340.	-0.	-.9639	.3753	.0911	.1421	.0083	.0193
.6	345.	-0.	-.9452	.3456	.1198	.1185	.0090	.0245
.6	350.	-0.	-.9311	.3144	.1599	.0998	.0098	.0389
.6	355.	-0.	-.9000	.2752	.1395	.0788	.0051	.0355

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	0.	-5.	-.3272	.3295	.1136	.0613	.0260	.0064
.6	5.	-5.	-.3117	.2455	.0627	.0714	.0226	-.0043
.6	10.	-5.	-.3039	.1795	.0724	.0795	.0223	-.0031
.6	15.	-5.	-.3119	.0970	.0891	.0827	.0270	-.0032
.6	20.	-5.	-.7522	-.0365	.0907	.0893	.0258	-.0004
.6	25.	-5.	-.0848	-.1125	.0952	.0902	.0219	.0034
.6	30.	-5.	-.6423	-.1965	.1543	.0940	.0264	.0152
.6	35.	-5.	-.5740	-.2906	.2097	.1035	.0334	.0216
.6	40.	-5.	-.5071	-.3742	.2543	.1159	.0366	.0229
.6	45.	-5.	-.4530	-.4327	.1838	.1359	.0305	.0155
.6	50.	-5.	-.4054	-.5018	.2120	.1466	.0373	.0206
.6	55.	-5.	-.3442	-.5404	.2125	.1581	.0401	.0159
.6	60.	-5.	-.3150	-.5755	.1996	.1828	.0307	.0203
.6	65.	-5.	-.2343	-.5793	.1715	.2025	.0323	.0146
.6	70.	-5.	-.2271	-.5898	.1530	.2126	.0252	.0429
.6	75.	-5.	-.1740	-.6731	.1001	.2164	.0086	.0664
.6	80.	-5.	.0334	-.6502	.6191	.1999	-.0005	.0366
.6	85.	-5.	.0871	-.6392	-.0405	.1906	-.0043	.0264
.6	90.	-5.	.0919	-.6266	-.1217	.1807	-.0222	.0247
.6	95.	-5.	.0787	-.6096	-.1324	.1720	-.0347	.0198
.6	100.	-5.	.0346	-.5904	-.1539	.1647	-.0295	.0103
.6	105.	-5.	.0359	-.5814	-.1205	.1633	-.0226	.0056
.6	110.	-5.	.1210	-.5765	-.0892	.1522	-.0170	.0102
.6	115.	-5.	.1814	-.5707	-.0535	.1313	-.0105	.0145
.6	120.	-5.	.3417	-.5383	-.0407	.0915	-.0177	.0281
.6	125.	-5.	.3991	-.5288	-.0464	.0730	-.0101	.0240
.6	130.	-5.	.4475	-.5163	-.0062	.0546	-.0075	.0205
.6	135.	-5.	.4833	-.5074	.0526	.0439	-.0023	.0151
.6	140.	-5.	.4934	-.5565	.1121	.0261	.0026	.0089
.6	145.	-5.	.4858	-.4415	.1348	-.0117	.0072	.0067
.6	150.	-5.	.5104	-.2978	.1211	-.0930	.0098	.0032
.6	155.	-5.	.5302	-.2322	.1254	-.1806	.0111	-.0048
.6	160.	-5.	.7051	-.1922	.1139	-.2156	.0143	-.0144
.6	165.	-5.	.7051	-.1424	.0945	-.2349	.0156	-.0192
.6	170.	-5.	.6934	-.0484	.0910	-.2452	.0165	-.0233
.6	175.	-5.	.6852	-.0485	.0852	-.2545	.0160	-.0174
.6	180.	-5.	.6169	.0073	.0943	-.2607	.0131	-.0104
.6	185.	-5.	.5653	.0458	.0686	-.2733	.0087	-.0142
.6	190.	-5.	.5469	.0047	.0364	-.3004	.0056	-.0152
.6	195.	-5.	.5741	-.0396	.0507	-.3273	.0194	-.0236
.6	200.	-5.	.5855	-.0441	.0580	-.3390	.0162	-.0188
.6	205.	-5.	.5916	-.0205	.0672	-.3536	.0139	-.0064
.6	210.	-5.	.5807	.0138	.1134	-.3576	.0172	.0262
.6	215.	-5.	.5640	.0821	.1590	-.3669	.0171	.0432
.6	220.	-5.	.5285	.1470	.1694	-.3629	.0093	.0678
.6	225.	-5.	.4856	.2290	.1661	-.3536	.0082	.0653
.6	230.	-5.	.4322	.3101	.1420	-.3332	.0074	.0578
.6	235.	-5.	.3536	.3919	.1334	-.3000	-.0016	.0629
.6	240.	-5.	.3504	.2664	.1099	-.2232	-.0080	.0629
.6	245.	-5.	.2725	.3314	.1453	-.1868	.0005	.0367
.6	250.	-5.	.2133	.3489	.1208	-.1495	.0036	.0181
.6	255.	-5.	.1386	.3728	.1274	-.1160	.0075	.0095
.6	260.	-5.	.0500	.3792	.1517	-.0649	.0077	.0383
.6	265.	-5.	-.0610	.4005	.1597	-.0258	.0132	.0464
.6	270.	-5.	-.1798	.4179	.1265	.0216	.0111	.0360
.6	275.	-5.	-.2890	.4736	.0910	.0576	.0022	.0375
.6	280.	-5.	-.3658	.4882	.0577	.0955	-.0047	.0359
.6	285.	-5.	-.4385	.4850	.0575	.1324	-.0054	.0393
.6	290.	-5.	-.4936	.4716	.0246	.1603	-.0118	.0330
.6	295.	-5.	-.5684	.4844	.0100	.1746	-.0098	.0210
.6	300.	-5.	-.6463	.4913	-.0339	.1840	-.0144	.0123
.6	305.	-5.	-.7247	.5002	-.0399	.1916	-.0129	.0053
.6	310.	-5.	-.7789	.4943	.0007	.2019	-.0027	.0038
.6	315.	-5.	-.8518	.4827	.0268	.2092	.0059	.0093
.6	320.	-5.	-.9109	.4748	.0129	.2041	.0052	.0150
.6	325.	-5.	-.9433	.4539	.0310	.1939	.0077	.0231
.6	330.	-5.	-.9588	.4350	.0359	.1801	.0096	.0174
.6	335.	-5.	-.9758	.4086	.0040	.1628	.0058	.0022
.6	340.	-5.	-.9636	.3757	-.0037	.1402	.0057	-.0066
.6	345.	-5.	-.9583	.3514	-.0596	.1211	.0000	-.0213
.6	350.	-5.	-.9103	.3152	-.0138	.0919	.0092	-.0150
.6	355.	-5.	-.8684	.2760	.0475	.0727	.0183	-.0026

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.5	0.	-10.	-.4333	.5209	.1487	.0736	.0482	-.0050
.5	5.	-10.	-.4436	.2524	.1832	.0677	.0494	.0052
.6	10.	-10.	-.4480	.1753	.1835	.0714	.0480	.0061
.6	15.	-10.	-.7344	.0924	.2243	.0720	.0515	.0072
.6	20.	-10.	-.7413	-.0083	.2448	.0869	.0518	.0110
.6	25.	-10.	-.7036	-.1053	.2744	.0936	.0543	.0160
.6	30.	-10.	-.6563	-.2015	.3127	.1049	.0573	.0254
.6	35.	-10.	-.5801	-.3015	.3492	.1172	.0618	.0248
.6	40.	-10.	-.5045	-.3895	.3831	.1234	.0669	.0272
.6	45.	-10.	-.4476	-.4954	.3822	.1378	.0659	.0293
.6	50.	-10.	-.4049	-.5168	.4175	.1640	.0684	.0415
.6	55.	-10.	-.3495	-.5604	.4194	.1830	.0668	.0543
.6	60.	-10.	-.2823	-.5745	.4217	.1931	.0714	.0499
.6	65.	-10.	-.2153	-.5792	.3837	.1855	.0578	.0589
.6	70.	-10.	-.1123	-.6552	.2756	.1933	.0356	.0881
.6	75.	-10.	-.0213	-.7012	.1360	.1868	.0243	.0858
.6	80.	-10.	.0442	-.6329	.1089	.1788	.0148	.0650
.6	85.	-10.	.0811	-.6504	.0694	.1793	-.0004	.0477
.6	90.	-10.	.0943	-.0384	-.0591	.1714	-.0103	.0378
.6	95.	-10.	.0930	-.0352	-.1394	.1670	-.0184	.0313
.6	100.	-10.	.1035	-.6241	-.1663	.1673	-.0183	.0271
.6	105.	-10.	.1157	-.0394	-.0409	.1602	-.0078	.0226
.6	110.	-10.	.1806	-.6075	-.0731	.1401	-.0124	.0244
.6	115.	-10.	.2140	-.6132	-.0562	.1323	-.0138	.0237
.6	120.	-10.	.3309	-.0419	-.0070	.0835	-.0111	.0431
.6	125.	-10.	.3334	-.0315	.0379	.0690	-.0081	.0410
.6	130.	-10.	.4540	-.6238	.0409	.0459	-.0096	.0379
.6	135.	-10.	.5060	-.6131	.1032	.0238	-.0013	.0350
.6	140.	-10.	.5962	-.5714	.2436	-.0072	.0083	.0255
.6	145.	-10.	.6823	-.4875	.2930	-.0432	.0179	.0207
.6	150.	-10.	.6550	-.3477	.3021	-.1074	.0271	.0065
.6	155.	-10.	.7149	-.2069	.2683	-.1697	.0304	-.0094
.6	160.	-10.	.7516	-.2265	.2350	-.2010	.0319	-.0234
.6	165.	-10.	.7447	-.1641	.1986	-.2250	.0325	-.0324
.6	170.	-10.	.7169	-.1045	.1748	-.2411	.0319	-.0346
.6	175.	-10.	.6493	-.0514	.1561	-.2537	.0298	-.0305

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	180.	-10.	.6461	-.0081	.1237	-.2635	.0242	-.0386
.6	185.	-10.	.5913	.0163	.1005	-.2786	.0171	-.0351
.6	190.	-10.	.6070	-.0492	.0894	-.3133	.0177	-.0137
.6	195.	-10.	.6236	-.0601	.1143	-.3366	.0195	-.0030
.6	200.	-10.	.6428	-.0644	.1204	-.3586	.0140	.0103
.6	205.	-10.	.6764	-.0650	.1460	-.3719	.0118	.0318
.6	210.	-10.	.6623	-.0109	.2044	-.3800	.0155	.0651
.6	215.	-10.	.6104	.0854	.3385	-.3817	.0203	.1070
.6	220.	-10.	.5592	.1535	.3316	-.3708	.0183	.1179
.6	225.	-10.	.5075	.2275	.3215	-.3525	.0130	.1236
.6	230.	-10.	.4564	.3013	.2997	-.3263	.0100	.1188
.6	235.	-10.	.3855	.3695	.2709	-.2833	-.0009	.1172
.6	240.	-10.	.3673	.2749	.2862	-.2264	-.0059	.0974
.6	245.	-10.	.2945	.3201	.2682	-.1917	.0112	.0663
.6	250.	-10.	.2162	.3685	.2949	-.1719	.0237	.0566
.6	255.	-10.	.1194	.4068	.3078	-.1333	.0267	.0552
.6	260.	-10.	.0076	.4243	.3218	-.0877	.0300	.0589
.6	265.	-10.	-.0869	.4199	.3099	-.0329	.0247	.0691
.6	270.	-10.	-.1861	.4325	.2717	.0207	.0222	.0743
.6	275.	-10.	-.2815	.4808	.1877	.0520	.0078	.0716
.6	280.	-10.	-.3643	.5137	.1454	.0835	-.0000	.0718
.6	285.	-10.	-.4345	.5090	.1196	.1123	-.0054	.0708
.6	290.	-10.	-.5081	.5077	.0976	.1398	-.0102	.0645
.6	295.	-10.	-.5819	.5067	.0740	.1577	-.0131	.0576
.6	300.	-10.	-.6603	.5193	.0445	.1722	-.0125	.0418
.6	305.	-10.	-.7327	.5114	.0432	.1888	-.0069	.0277
.6	310.	-10.	-.7871	.4970	.0665	.2044	.0046	.0194
.6	315.	-10.	-.8223	.4790	.1043	.1951	.0073	.0354
.6	320.	-10.	-.8859	.4730	.1105	.1930	.0129	.0380
.6	325.	-10.	-.9284	.4621	.1145	.1841	.0154	.0412
.6	330.	-10.	-.9606	.4459	.1006	.1739	.0202	.0306
.6	335.	-10.	-.9669	.4109	.0886	.1601	.0207	.0244
.6	340.	-10.	-.9679	.3815	.0782	.1451	.0198	.0150
.6	345.	-10.	-.9568	.3523	.0817	.1285	.0226	.0032
.6	350.	-10.	-.9170	.3289	.1016	.1002	.0341	-.0031
.6	355.	-10.	-.8978	.2836	.1075	.0921	.0422	-.0069

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.5	0.	-15.	-.4283	.3232	.2751	.0711	.0721	.0110
.6	5.	-15.	-.3953	.2631	.3001	.0641	.0725	.0173
.5	10.	-15.	-.3541	.1954	.3320	.0684	.0710	.0196
.5	15.	-15.	-.4025	.0922	.3675	.0771	.0756	.0232
.6	20.	-15.	-.7005	-.0014	.3910	.0917	.0775	.0217
.5	25.	-15.	-.6341	-.0964	.4118	.1021	.0850	.0154
.6	30.	-15.	-.5426	-.1417	.4335	.1115	.0837	.0091
.6	35.	-15.	-.5377	-.2754	.4720	.1034	.0846	.0102
.5	40.	-15.	-.4959	-.3785	.5345	.1249	.0944	.0278
.6	45.	-15.	-.4586	-.4425	.5511	.1403	.0901	.0463
.6	50.	-15.	-.5859	-.5159	.5654	.1703	.0946	.0571
.6	55.	-15.	-.3258	-.5551	.5587	.1928	.0951	.0630
.5	60.	-15.	-.2556	-.5424	.5333	.2000	.0825	.0801
.6	65.	-15.	-.1391	-.5915	.4843	.1964	.0649	.0831
.6	70.	-15.	-.0435	-.5752	.4235	.1953	.0501	.0948
.6	75.	-15.	.0062	-.7151	.3133	.1931	.0405	.0904
.6	80.	-15.	.0589	-.7234	.2378	.1800	.0347	.0724
.5	85.	-15.	.1114	-.6883	.1243	.1673	.0176	.0472
.6	90.	-15.	.1321	-.6694	.0351	.1648	.0057	.0389
.5	95.	-15.	.1534	-.6694	-.0125	.1676	.0015	.0303
.6	100.	-15.	.1601	-.6478	-.0149	.1654	-.0001	.0274
.6	105.	-15.	.1704	-.6283	.0075	.1517	.0003	.0267
.6	110.	-15.	.2056	-.6201	.0181	.1433	.0062	.0245
.5	115.	-15.	.2291	-.6127	.0313	.1235	.0015	.0178
.5	120.	-15.	.3403	-.6462	.1011	.0765	-.0019	.0455
.5	125.	-15.	.4073	-.6416	.1624	.0504	.0005	.0537
.6	130.	-15.	.4726	-.6313	.2239	.0235	.0027	.0538
.6	135.	-15.	.5505	-.6123	.2952	-.0071	.0084	.0438
.6	140.	-15.	.6134	-.5921	.3545	-.0357	.0169	.0341
.6	145.	-15.	.6745	-.5273	.4059	-.0748	.0247	.0288
.6	150.	-15.	.7241	-.4343	.4345	-.1151	.0408	.0137
.6	155.	-15.	.7726	-.3390	.3753	-.1585	.0471	-.0179
.6	160.	-15.	.7745	-.2564	.3308	-.1884	.0493	-.0299
.6	165.	-15.	.7522	-.1784	.3040	-.2117	.0486	-.0317
.6	170.	-15.	.7241	-.1012	.2823	-.2333	.0473	-.0400
.6	175.	-15.	.7022	-.0520	.2234	-.2436	.0416	-.0331
.6	180.	-15.	.6736	-.0130	.1967	-.2619	.0348	-.0392
.6	185.	-15.	.6357	.0153	.1721	-.2807	.0272	-.0288
.6	190.	-15.	.6429	-.0379	.1493	-.3203	.0249	-.0029
.6	195.	-15.	.6583	-.0496	.1660	-.3404	.0219	.0189
.6	200.	-15.	.6932	-.0643	.1887	-.3637	.0171	.0424
.6	205.	-15.	.7350	-.0557	.2313	-.3844	.0172	.0708
.6	210.	-15.	.7245	-.0070	.2871	-.3923	.0220	.0937
.6	215.	-15.	.6869	.0716	.3778	-.3876	.0207	.1435
.6	220.	-15.	.6145	.1301	.4205	-.3759	.0260	.1523
.6	225.	-15.	.5476	.1980	.4200	-.3500	.0231	.1531
.6	230.	-15.	.4922	.2797	.4041	-.3214	.0167	.1491
.6	235.	-15.	.4165	.3569	.3857	-.2751	.0110	.1380
.6	240.	-15.	.4124	.2756	.3847	-.2331	.0129	.1130
.6	245.	-15.	.3610	.3254	.3924	-.2148	.0309	.1023
.6	250.	-15.	.2395	.3637	.4474	-.1806	.0399	.1044
.6	255.	-15.	.1162	.4059	.4614	-.1357	.0405	.1050
.6	260.	-15.	.0050	.4311	.4559	-.0877	.0432	.1097
.6	265.	-15.	-.1138	.4522	.4398	-.0400	.0419	.1114
.6	270.	-15.	-.2025	.4774	.3476	.0049	.0227	.1072
.6	275.	-15.	-.2689	.5095	.2870	.0413	.0126	.1036
.6	280.	-15.	-.3683	.5234	.2525	.0729	.0078	.1073
.6	285.	-15.	-.4434	.5296	.2198	.1020	.0064	.0952
.6	290.	-15.	-.5252	.5369	.1975	.1224	.0024	.0944
.6	295.	-15.	-.5862	.5319	.1891	.1364	-.0006	.0966
.6	300.	-15.	-.6641	.5304	.1656	.1568	-.0012	.0817
.6	305.	-15.	-.7134	.5244	.1575	.1709	.0058	.0622
.6	310.	-15.	-.7505	.5133	.1739	.1767	.0139	.0539
.6	315.	-15.	-.8062	.4911	.1930	.1835	.0208	.0519
.6	320.	-15.	-.8556	.4734	.1814	.1771	.0265	.0469
.6	325.	-15.	-.9080	.4592	.1957	.1737	.0311	.0504
.6	330.	-15.	-.9496	.4483	.2012	.1675	.0339	.0494
.6	335.	-15.	-.9678	.4246	.1988	.1548	.0368	.0427
.6	340.	-15.	-.9706	.3970	.2043	.1436	.0403	.0384
.6	345.	-15.	-.9562	.3696	.2027	.1261	.0427	.0306
.6	350.	-15.	-.9267	.3401	.2147	.1032	.0519	.0197
.6	355.	-15.	-.9105	.2908	.2292	.0993	.0642	.0123

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	0.	-30.	-.8344	.3239	.0824	.0546	.1437	.0466
.6	5.	-30.	-.8312	.2827	.0934	.0614	.1484	.0403
.6	10.	-30.	-.7711	.1795	.7055	.0655	.1492	.0453
.6	15.	-30.	-.7243	.1027	.7617	.0689	.1527	.0486
.6	20.	-30.	-.6821	.0135	.8211	.0750	.1518	.0546
.6	25.	-30.	-.0395	-.0775	.8452	.0944	.1512	.0417
.6	30.	-30.	-.5773	-.1719	.8734	.1056	.1473	.0452
.6	35.	-30.	-.5046	-.2579	.9007	.1235	.1469	.0535
.6	40.	-30.	-.4439	-.3313	.9142	.1473	.1496	.0498
.6	45.	-30.	-.3853	-.3395	.9275	.1587	.1522	.0618
.6	50.	-30.	-.3019	-.4597	.9302	.1731	.1538	.0720
.6	55.	-30.	-.2231	-.5142	.9104	.1832	.1465	.0947
.6	60.	-30.	-.1527	-.5745	.8635	.1959	.1293	.1030
.6	65.	-30.	-.0940	-.6037	.8053	.2033	.1168	.0998
.6	70.	-30.	.0128	-.6048	.7435	.1804	.1045	.1081
.6	75.	-30.	.1015	-.5892	.6928	.1669	.0834	.1048
.6	80.	-30.	.1577	-.5854	.5709	.1715	.0781	.0833
.6	85.	-30.	.2144	-.5843	.4999	.1654	.0751	.0620
.6	90.	-30.	.2427	-.6049	.4473	.1448	.0721	.0417
.6	95.	-30.	.2563	-.6432	.4234	.1374	.0692	.0243
.6	100.	-30.	.2802	-.6271	.4217	.1234	.0655	.0248
.6	105.	-30.	.2379	-.6249	.4164	.1150	.0575	.0234
.6	110.	-30.	.3331	-.5971	.4143	.0982	.0575	.0237
.6	115.	-30.	.3844	-.5647	.4013	.0752	.0563	.0143
.6	120.	-30.	.4209	-.5027	.4738	.0739	.0497	.0416
.6	125.	-30.	.3871	-.5382	.4798	.0443	.0430	.0391
.6	130.	-30.	.4031	-.5033	.4979	.0120	.0491	.0387
.6	135.	-30.	.5210	-.5330	.5124	-.0209	.0492	.0351
.6	140.	-30.	.5918	-.4451	.5240	-.0593	.0515	.0330
.6	145.	-30.	.6434	-.4346	.5432	-.0803	.0579	.0205
.6	150.	-30.	.6759	-.3662	.5290	-.1123	.0545	.0210
.6	155.	-30.	.6944	-.2843	.5252	-.1372	.0567	.0120
.6	160.	-30.	.7145	-.1964	.5108	-.1635	.0508	.0124
.6	165.	-30.	.7139	-.1074	.4433	-.1834	.0547	.0118
.6	170.	-30.	.7204	-.0432	.4069	-.2078	.0598	.0176
.6	175.	-30.	.7154	.0183	.4029	-.2288	.0573	.0226

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.6	180.	-30.	.0963	.0492	.4655	-.2537	.0590	.0231
.6	185.	-30.	.0977	.0470	.4398	-.2871	.0493	.0439
.6	190.	-30.	.7221	.0431	.4291	-.3331	.0432	.0501
.6	195.	-30.	.7579	.0165	.4236	-.3448	.0385	.0694
.6	200.	-30.	.7752	.0037	.4408	-.3491	.0360	.0910
.6	205.	-30.	.7941	-.0324	.4790	-.3557	.0338	.1207
.6	210.	-30.	.8190	-.0033	.5334	-.3773	.0311	.1535
.6	215.	-30.	.8031	.0295	.5572	-.3863	.0326	.1710
.6	220.	-30.	.7732	.0671	.6336	-.3827	.0366	.2065
.6	225.	-30.	.7034	.1226	.7086	-.3607	.0419	.2353
.6	230.	-30.	.6082	.1893	.7873	-.3254	.0547	.2541
.6	235.	-30.	.5210	.2552	.8249	-.2949	.0647	.2552
.6	240.	-30.	.5020	.2036	.8982	-.2527	.0487	.2778
.6	245.	-30.	.4153	.2565	.8829	-.2128	.0560	.2651
.6	250.	-30.	.3408	.3115	.8779	-.1701	.0650	.2587
.6	255.	-30.	.2526	.3644	.8085	-.1370	.0626	.2399
.6	260.	-30.	.1043	.4468	.7233	-.1095	.0565	.2102
.6	265.	-30.	-.0347	.4911	.7329	-.0677	.0581	.2133
.6	270.	-30.	-.1602	.5218	.7047	-.0235	.0551	.2142
.6	275.	-30.	-.2823	.5455	.6702	.0167	.0539	.2165
.6	280.	-30.	-.3563	.5467	.6476	.0434	.0535	.2168
.6	285.	-30.	-.4205	.5414	.6386	.0640	.0550	.2153
.6	290.	-30.	-.4826	.5385	.6324	.0805	.0555	.2187
.6	295.	-30.	-.5331	.5341	.6287	.0914	.0553	.2065
.6	300.	-30.	-.5538	.5175	.6400	.1087	.0631	.1975
.6	305.	-30.	-.6056	.5172	.6454	.1186	.0688	.1926
.6	310.	-30.	-.6469	.5097	.6480	.1190	.0723	.1866
.6	315.	-30.	-.7166	.5065	.6347	.1315	.0779	.1691
.6	320.	-30.	-.7705	.4974	.6382	.1358	.0867	.1542
.6	325.	-30.	-.8041	.4823	.6328	.1325	.0944	.1396
.6	330.	-30.	-.8373	.4638	.6280	.1308	.1025	.1260
.6	335.	-30.	-.8493	.4285	.6273	.1206	.1091	.1120
.6	340.	-30.	-.8611	.4002	.6196	.1108	.1105	.0989
.6	345.	-30.	-.8542	.3715	.6231	.1042	.1171	.0844
.6	350.	-30.	-.8350	.3394	.6429	.0911	.1308	.0757
.6	355.	-30.	-.8142	.2879	.6583	.0896	.1406	.0692

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.5	0.	-45.	-.5324	.2755	1.1551	.0353	.1982	.1024
.5	5.	-45.	-.6378	.2557	1.1579	.0203	.2076	.1460
.5	10.	-45.	-.5533	.2472	1.1332	.0141	.2120	.1439
.5	15.	-45.	-.5243	.1295	1.1774	.0216	.2006	.1501
.5	20.	-45.	-.5252	.0587	1.1024	.0540	.1909	.1205
.5	25.	-45.	-.4791	-.0112	1.1448	.0713	.1877	.1040
.5	30.	-45.	-.4013	-.1053	1.1457	.0840	.1832	.0912
.5	35.	-45.	-.3617	-.1476	1.0361	.1046	.1744	.0871
.5	40.	-45.	-.2991	-.2434	1.0354	.1132	.1705	.0813
.5	45.	-45.	-.2315	-.2945	1.1218	.1215	.1896	.0831
.5	50.	-45.	-.1961	-.3479	1.1213	.1390	.1808	.0815
.5	55.	-45.	-.0827	-.4123	1.1020	.1266	.1728	.0998
.5	60.	-45.	-.0438	-.4523	1.0939	.1639	.1630	.1120
.5	65.	-45.	-.0180	-.4715	1.0000	.1749	.1514	.1145
.5	70.	-45.	.0534	-.4347	1.1418	.1697	.1456	.1196
.5	75.	-45.	.1242	-.5154	1.0000	.1658	.1403	.1041
.5	80.	-45.	.1752	-.5347	.9826	.1577	.1353	.0954
.5	85.	-45.	.2258	-.5545	.9138	.1454	.1249	.0831
.5	90.	-45.	.2727	-.5318	.9749	.1342	.1263	.0709
.5	95.	-45.	.3233	-.5313	.9059	.1283	.1265	.0622
.5	100.	-45.	.3545	-.5314	.8466	.1172	.1275	.0483
.5	105.	-45.	.3934	-.5269	.8272	.1053	.1279	.0380
.5	110.	-45.	.4196	-.5196	.8027	.0957	.1242	.0313
.5	115.	-45.	.4617	-.4975	.7779	.0633	.1208	.0219
.5	120.	-45.	.5002	-.4855	.7539	.0581	.0861	.0508
.5	125.	-45.	.5336	-.4625	.7400	.0283	.0802	.0614
.5	130.	-45.	.5349	-.4323	.4323	-.3044	.0322	.0652
.5	135.	-45.	.4433	-.4038	.3244	-.0355	.0896	.0645
.5	140.	-45.	.4748	-.3554	.4043	-.0610	.0872	.0599
.5	145.	-45.	.5342	-.2962	.7703	-.0824	.0852	.0541
.5	150.	-45.	.5444	-.2282	.7034	-.1034	.0802	.0539
.5	155.	-45.	.5038	-.1790	.7034	-.1356	.0741	.0593
.5	160.	-45.	.5456	-.1356	.7643	-.1651	.0701	.0623
.5	165.	-45.	.5171	-.0852	.7502	-.1840	.0654	.0650
.5	170.	-45.	.5443	-.0375	.7441	-.2101	.0603	.0735
.5	175.	-45.	.5533	-.0007	.7521	-.2356	.0565	.0791
.5	180.	-45.	.6666	.0377	.7436	-.2589	.0542	.0848
.5	185.	-45.	.6819	.0611	.7431	-.2845	.0504	.1008
.5	190.	-45.	.6887	.0607	.7346	-.3040	.0493	.1205
.5	195.	-45.	.7060	.0652	.7333	-.3147	.0494	.1373
.6	200.	-45.	.7114	.0761	.7443	-.3178	.0495	.1557
.6	205.	-45.	.7187	.0769	.7693	-.3195	.0511	.1762
.5	210.	-45.	.7475	.0262	.8122	-.3222	.0537	.2031
.5	215.	-45.	.7610	.0117	.8591	-.3193	.0521	.2380
.5	220.	-45.	.7294	.0343	.9107	-.3074	.0544	.2615
.5	225.	-45.	.6917	.0705	.9601	-.2958	.0590	.2842
.5	230.	-45.	.6444	.1163	1.0105	-.2796	.0666	.3086
.5	235.	-45.	.5601	.1730	1.0263	-.2516	.0721	.3159
.5	240.	-45.	.5937	.1225	1.1107	-.2282	.0647	.3595
.5	245.	-45.	.4903	.1995	1.0958	-.1985	.0667	.3508
.5	250.	-45.	.3848	.2601	1.0682	-.1616	.0689	.3388
.5	255.	-45.	.2597	.3122	1.0787	-.1171	.0754	.3350
.5	260.	-45.	.1432	.3587	1.0786	-.0817	.0852	.3216
.5	265.	-45.	.0401	.3908	1.0609	-.0515	.0874	.3127
.5	270.	-45.	-.0391	.3969	1.0417	-.0297	.0838	.3096
.5	275.	-45.	-.1176	.4120	1.0383	-.0033	.0936	.3067
.5	280.	-45.	-.1701	.4258	1.0376	.0199	.0976	.3032
.5	285.	-45.	-.2172	.4384	1.0438	.0299	.1058	.3035
.5	290.	-45.	-.2512	.4406	1.0622	.0333	.1187	.3021
.5	295.	-45.	-.3222	.4390	1.0711	.0483	.1228	.3075
.5	300.	-45.	-.3842	.4410	1.0750	.0616	.1260	.3030
.5	305.	-45.	-.4514	.4377	1.0687	.0724	.1282	.2939
.6	310.	-45.	-.5053	.4263	1.0709	.0778	.1331	.2879
.5	315.	-45.	-.5630	.4189	1.0623	.0840	.1366	.2750
.5	320.	-45.	-.6101	.4129	1.0678	.0855	.1426	.2637
.5	325.	-45.	-.6440	.3973	1.0787	.0867	.1492	.2533
.5	330.	-45.	-.6623	.3752	1.0819	.0885	.1554	.2414
.5	335.	-45.	-.6743	.3518	1.0906	.0860	.1647	.2258
.5	340.	-45.	-.6486	.2953	1.1083	.0763	.1785	.2076
.5	345.	-45.	-.6535	.2779	1.1152	.0721	.1843	.2011
.5	350.	-45.	-.6359	.2532	1.1154	.0687	.1889	.1900
.5	355.	-45.	-.6280	.2326	1.1188	.0642	.1940	.1844

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-0.	-1.1987	.3367	.0229	.0853	.0037	.0039
.9	5.	-0.	-1.1457	.3221	.0146	.0755	.0025	.0031
.9	10.	-0.	-.9959	.2453	-.0072	.0824	.0014	-.0022
.9	15.	-0.	-.8239	.1564	-.0220	.0982	.0051	-.0016
.9	20.	-0.	-.6634	.0827	-.0337	.1104	.0061	-.0036
.9	25.	-0.	-.5471	-.0005	-.0315	.1146	.0037	-.0018
.9	30.	-0.	-.4719	-.0709	-.0244	.1304	.0018	-.0000
.9	35.	-0.	-.4139	-.1233	-.0244	.1428	.0061	.0049
.9	40.	-0.	-.3633	-.1752	.0151	.1423	-.0004	.0076
.9	45.	-0.	-.3710	-.2304	.0154	.1500	.0020	-.0021
.9	50.	-0.	-.3047	-.2425	.0074	.1481	.0036	-.0024
.9	55.	-0.	-.2414	-.2169	.0089	.1532	.0025	-.0027
.9	60.	-0.	-.2226	-.2645	.0142	.1532	.0023	.0038
.9	65.	-0.	-.1892	-.2787	.0229	.1659	.0013	-.0034
.9	70.	-0.	-.1291	-.2737	-.0253	.1644	-.0003	-.0020
.9	75.	-0.	-.0849	-.2725	-.0215	.1649	-.0057	.0004
.9	80.	-0.	-.0394	-.2723	-.0281	.1593	-.0007	.0031
.9	85.	-0.	.1114	-.2644	-.0129	.1546	-.0018	-.0007
.9	90.	-0.	.1134	-.2637	-.0277	.1574	-.0035	-.0010
.9	95.	-0.	.1353	-.2562	-.0252	.1619	-.0043	-.0019
.9	100.	-0.	.1473	-.2625	-.0472	.1655	-.0041	.0003
.9	105.	-0.	.1235	-.2628	-.0317	.1649	-.0058	-.0036
.9	110.	-0.	.1493	-.2652	-.0325	.1734	-.0038	-.0018
.9	115.	-0.	.1772	-.2584	-.0136	.1529	-.0030	.0001
.9	120.	-0.	.3016	-.2494	.0077	.1287	.0012	-.0037
.9	125.	-0.	.3014	-.2363	.0234	.1233	.0001	.0005
.9	130.	-0.	.4241	-.2143	.0178	.0947	.0032	-.0030
.9	135.	-0.	.2444	-.2402	-.0157	.1394	.0006	-.0029
.9	140.	-0.	.2724	-.2294	-.0254	.0854	-.0025	-.0031
.9	145.	-0.	.3503	-.2322	-.0254	.0071	-.0058	-.0036
.9	150.	-0.	.4522	-.1473	-.0241	-.0934	-.0015	-.0051
.9	155.	-0.	.3347	-.0944	-.0225	-.1852	.0023	-.0053
.9	160.	-0.	.3140	-.0247	-.0122	-.2454	.0003	-.0047
.9	165.	-0.	.3134	.0195	-.0116	-.2951	.0010	-.0071
.9	170.	-0.	.3351	.0561	-.0033	-.3226	.0029	-.0052
.9	175.	-0.	.7125	.0456	.0112	-.3137	.0043	-.0076
.9	180.	-0.	.5610	.0669	.0319	-.3136	.0057	-.0119
.9	185.	-0.	.6287	.0757	-.0049	-.3242	.0034	-.0145
.9	190.	-0.	.6141	.0893	-.0125	-.3330	.0047	-.0232
.9	195.	-0.	.6357	.0377	-.0088	-.3461	.0108	-.0262
.9	200.	-0.	.7064	-.0477	-.0309	-.3519	.0044	-.0222
.9	205.	-0.	.6971	-.0119	-.0011	-.3608	.0068	-.0221
.9	210.	-0.	.6815	.0313	.0070	-.3649	.0069	-.0209
.9	215.	-0.	.6771	.0795	-.0037	-.3747	.0024	-.0001
.9	220.	-0.	.6322	.1365	.0132	-.3602	.0025	.0057
.9	225.	-0.	.5582	.2038	.0102	-.3313	.0024	.0071
.9	230.	-0.	.5058	.2561	.0070	-.3246	.0030	.0061
.9	235.	-0.	.4142	.3261	-.0103	-.2876	.0046	-.0022
.9	240.	-0.	.4749	.2861	-.0089	-.2499	-.0045	-.0014
.9	245.	-0.	.3854	.3483	-.0090	-.2106	.0005	-.0081
.9	250.	-0.	.2979	.3724	-.0161	-.1620	-.0044	-.0044
.9	255.	-0.	.2001	.3474	-.0227	-.1046	-.0066	.0001
.9	260.	-0.	.0910	.3694	-.0237	-.0682	-.0043	-.0038
.9	265.	-0.	-.0280	.4079	-.0156	-.0374	-.0009	-.0008
.9	270.	-0.	-.1863	.4688	-.0157	.0076	-.0008	.0068
.9	275.	-0.	-.3004	.5113	-.0176	.0477	-.0004	.0052
.9	280.	-0.	-.4213	.5383	-.0162	.1017	-.0009	.0017
.9	285.	-0.	-.4944	.5340	-.0100	.1472	.0007	-.0010
.9	290.	-0.	-.5743	.5377	.0245	.1867	.0066	.0016
.9	295.	-0.	-.6630	.5507	.0162	.2116	.0054	-.0044
.9	300.	-0.	-.7435	.5759	-.0397	.2144	-.0044	-.0073
.9	305.	-0.	-.8194	.5927	-.0761	.2138	-.0091	-.0092
.9	310.	-0.	-.9011	.6133	-.0783	.2129	-.0081	-.0074
.9	315.	-0.	-.9653	.6061	-.0820	.2224	-.0056	-.0054
.9	320.	-0.	-1.0265	.5687	-.0428	.2216	-.0043	-.0082
.9	325.	-0.	-1.0686	.5432	-.0188	.2113	.0017	-.0105
.9	330.	-0.	-1.0814	.5102	-.0203	.1940	.0010	-.0091
.9	335.	-0.	-1.0743	.4701	-.0170	.1743	-.0003	-.0061
.9	340.	-0.	-1.0694	.4279	-.0019	.1583	.0006	-.0031
.9	345.	-0.	-1.0581	.3903	.0520	.1412	.0040	.0050
.9	350.	-0.	-1.0162	.3452	.0473	.1196	.0064	.0052
.9	355.	-0.	-.9804	.3089	.0723	.1004	.0054	.0147

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-5.	-1.0370	.3431	.0781	.0857	.0250	.0009
.9	5.	-5.	-1.0545	.3117	.0747	.0815	.0258	-.0136
.9	10.	-5.	-1.0332	.2394	.0481	.0905	.0245	.0002
.9	15.	-5.	-.9332	.1554	.0984	.0940	.0258	-.0016
.9	20.	-5.	-.8506	.0442	.1194	.1075	.0291	.0109
.9	25.	-5.	-.7819	-.0659	.1374	.1153	.0291	.0115
.9	30.	-5.	-.7219	-.1754	.1495	.1207	.0280	.0161
.9	35.	-5.	-.6545	-.2814	.1719	.1489	.0245	.0201
.9	40.	-5.	-.5877	-.3869	.1821	.1640	.0267	.0189
.9	45.	-5.	-.4761	-.4835	.1947	.1604	.0321	.0129
.9	50.	-5.	-.3710	-.5734	.1977	.1645	.0271	.0226
.9	55.	-5.	-.2814	-.6245	.1859	.1651	.0284	.0132
.9	60.	-5.	-.2175	-.6597	.1846	.1623	.0249	.0235
.9	65.	-5.	-.1632	-.6724	.1854	.1544	.0246	.0209
.9	70.	-5.	-.0772	-.7142	.0834	.1524	.0184	.0320
.9	75.	-5.	.0232	-.7592	.0409	.1504	.0180	.0315
.9	80.	-5.	.0878	-.7294	-.0446	.1565	-.0015	.0223
.9	85.	-5.	.1335	-.6847	-.0936	.1564	-.0102	.0018
.9	90.	-5.	.1898	-.6548	-.1244	.1577	-.0143	-.0065
.9	95.	-5.	.1897	-.6522	-.1212	.1620	-.0179	-.0057
.9	100.	-5.	.1290	-.6849	-.0944	.1624	-.0140	-.0037
.9	105.	-5.	.1478	-.6394	-.0792	.1631	-.0112	.0007
.9	110.	-5.	.1522	-.6357	-.0735	.1600	-.0095	.0041
.9	115.	-5.	.2034	-.6225	-.0458	.1522	-.0041	.0081
.9	120.	-5.	.3245	-.7084	-.0615	.1201	-.0117	.0241
.9	125.	-5.	.3818	-.7125	-.0178	.1031	-.0046	.0260
.9	130.	-5.	.4103	-.6428	.0319	.0910	-.0001	.0225
.9	135.	-5.	.2545	-.6359	.0463	.1289	.0056	-.0041
.9	140.	-5.	.2376	-.6233	.0533	.0760	.0123	.0014
.9	145.	-5.	.4034	-.5484	.0403	-.0112	.0156	.0018
.9	150.	-5.	.4770	-.1598	.0587	-.1027	.0144	.0041
.9	155.	-5.	.5531	-.0777	.0832	-.1761	.0143	.0052
.9	160.	-5.	.6033	-.0372	.0750	-.2413	.0127	-.0059
.9	165.	-5.	.6144	.0065	.0806	-.2934	.0102	-.0052
.9	170.	-5.	.7370	-.0206	.1173	-.2894	.0249	-.0202
.9	175.	-5.	.7233	.0175	.0884	-.2993	.0230	-.0218
.9	180.	-5.	.6706	.0433	.0620	-.3078	.0198	-.0312
.9	185.	-5.	.6512	.0563	.0546	-.3255	.0126	-.0298
.9	190.	-5.	.6191	.0664	.0501	-.3398	.0120	-.0196
.9	195.	-5.	.6757	.0044	.0556	-.3562	.0140	-.0158
.9	200.	-5.	.7145	-.0445	.0497	-.3608	.0078	.0015
.9	205.	-5.	.7092	-.0047	.0852	-.3668	.0102	.0108
.9	210.	-5.	.6878	.0400	.1091	-.3731	.0104	.0269
.9	215.	-5.	.6808	.0844	.1135	-.3753	.0022	.0572
.9	220.	-5.	.6277	.1406	.1312	-.3598	.0023	.0707
.9	225.	-5.	.5536	.2050	.1313	-.3346	.0034	.0718
.9	230.	-5.	.5040	.2674	.1176	-.3191	.0027	.0657
.9	235.	-5.	.4189	.3210	.1362	-.2869	-.0039	.0447
.9	240.	-5.	.4881	.2850	.1693	-.2558	-.0069	.0586
.9	245.	-5.	.3853	.3439	.1532	-.2076	.0015	.0441
.9	250.	-5.	.3861	.3849	.1495	-.1664	.0094	.0207
.9	255.	-5.	.2845	.3836	.1438	-.1158	.0110	.0129
.9	260.	-5.	.1972	.4043	.1397	-.0801	.0119	.0123
.9	265.	-5.	-.0538	.4298	.1238	-.0382	.0091	.0127
.9	270.	-5.	-.1488	.4890	.0845	.0023	.0029	.0213
.9	275.	-5.	-.3216	.5403	.0645	.0450	-.0022	.0270
.9	280.	-5.	-.4205	.5587	.0443	.0937	-.0056	.0288
.9	285.	-5.	-.5204	.5606	.0365	.1452	-.0072	.0329
.9	290.	-5.	-.5982	.5516	.0464	.1839	-.0074	.0329
.9	295.	-5.	-.6649	.5574	.0162	.2057	-.0081	.0280
.9	300.	-5.	-.7511	.5742	-.0048	.2132	-.0092	.0183
.9	305.	-5.	-.8164	.5762	.0020	.2155	-.0046	.0085
.9	310.	-5.	-.8478	.6049	-.0311	.2201	-.0069	.0046
.9	315.	-5.	-.8521	.5946	.0070	.2179	.0036	.0112
.9	320.	-5.	-1.0394	.5727	.0332	.2222	.0090	.0135
.9	325.	-5.	-1.0866	.5345	.0396	.2106	.0119	.0128
.9	330.	-5.	-1.0948	.5109	.0252	.1989	.0107	.0085
.9	335.	-5.	-1.0902	.4750	.0155	.1783	.0104	.0008
.9	340.	-5.	-1.0935	.4437	-.0098	.1591	.0084	-.0079
.9	345.	-5.	-1.0734	.4040	-.0006	.1397	.0092	-.0064
.9	350.	-5.	-1.0290	.3543	.0206	.1199	.0116	-.0076
.9	355.	-5.	-1.0024	.3155	.0255	.1041	.0149	-.0061

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-10.	-1.0333	.3734	.1920	.0925	.0471	.0047
.9	5.	-10.	-1.0509	.3090	.2144	.0842	.0522	.0094
.9	10.	-10.	-1.0011	.2431	.2420	.0914	.0535	.0165
.9	15.	-10.	-.9345	.1481	.2452	.1014	.0513	.0124
.9	20.	-10.	-.8515	.0389	.2635	.1109	.0560	.0081
.9	25.	-10.	-.7910	-.0704	.2887	.1212	.0527	.0174
.9	30.	-10.	-.7222	-.1807	.3078	.1363	.0559	.0142
.9	35.	-10.	-.6610	-.3000	.3226	.1552	.0523	.0162
.9	40.	-10.	-.5874	-.4307	.3250	.1711	.0553	.0187
.9	45.	-10.	-.4994	-.4942	.3172	.1773	.0499	.0254
.9	50.	-10.	-.4117	-.5724	.3122	.1945	.0513	.0388
.9	55.	-10.	-.3082	-.6233	.2928	.1928	.0467	.0521
.9	60.	-10.	-.2106	-.6575	.2810	.1841	.0447	.0609
.9	65.	-10.	-.1137	-.6810	.2406	.1616	.0394	.0560
.9	70.	-10.	-.0224	-.7239	.1996	.1521	.0284	.0435
.9	75.	-10.	.0398	-.7502	.0896	.1454	.0217	.0341
.9	80.	-10.	.0433	-.7447	.0411	.1515	.0158	.0220
.9	85.	-10.	.0443	-.7097	-.0332	.1635	.0048	.0080
.9	90.	-10.	.0323	-.6915	-.0618	.1664	-.0021	.0009
.9	95.	-10.	.1135	-.6825	-.0830	.1718	-.0071	.0033
.9	100.	-10.	.1372	-.6644	-.0999	.1722	-.0033	.0041
.9	105.	-10.	.1801	-.6646	-.0748	.1676	-.0053	.0081
.9	110.	-10.	.2212	-.6587	-.0770	.1564	-.0104	.0117
.9	115.	-10.	.2611	-.6517	-.0470	.1434	-.0022	.0100
.9	120.	-10.	.3582	-.7134	.0425	.1074	-.0019	.0423
.9	125.	-10.	.4247	-.7593	.0900	.0859	.0015	.0474
.9	130.	-10.	.4842	-.8053	.1560	.0674	.0070	.0521
.9	135.	-10.	.2755	-.6267	.1702	.1100	.0144	.0144
.9	140.	-10.	.3516	-.5091	.1689	.0395	.0214	.0205
.9	145.	-10.	.4333	-.3743	.1877	-.0425	.0298	.0236
.9	150.	-10.	.5494	-.2113	.2217	-.1107	.0349	.0203
.9	155.	-10.	.6253	-.1255	.2607	-.1678	.0366	.0155
.9	160.	-10.	.6703	-.0719	.2439	-.2320	.0307	.0031
.9	165.	-10.	.6816	-.0153	.2579	-.2739	.0248	-.0020
.9	170.	-10.	.7041	-.0469	.2494	-.2711	.0498	-.0333
.9	175.	-10.	.7020	-.0005	.2006	-.2321	.0448	-.0395
.9	180.	-10.	.7257	.0397	.1716	-.2968	.0347	-.0268
.9	185.	-10.	.6788	.0467	.1344	-.3203	.0190	-.0083
.9	190.	-10.	.6778	.0412	.1159	-.3407	.0095	.0051
.9	195.	-10.	.7108	-.0211	.1480	-.3601	.0175	.0217
.9	200.	-10.	.7278	-.0333	.1624	-.3688	.0110	.0404
.9	205.	-10.	.7197	-.0014	.1844	-.3756	.0124	.0532
.9	210.	-10.	.7117	.0385	.2128	-.3793	.0102	.0778
.9	215.	-10.	.6930	.0780	.2412	-.3764	.0052	.1106
.9	220.	-10.	.6397	.1282	.2437	-.3597	.0020	.1217
.9	225.	-10.	.5808	.1861	.2415	-.3386	.0029	.1184
.9	230.	-10.	.5137	.2555	.2479	-.3133	.0027	.1143
.9	235.	-10.	.4406	.3206	.2646	-.2855	-.0033	.1188
.9	240.	-10.	.4972	.2773	.3248	-.2593	-.0013	.1104
.9	245.	-10.	.3975	.3340	.3182	-.2091	.0128	.0847
.9	250.	-10.	.3173	.3820	.3047	-.1724	.0288	.0570
.9	255.	-10.	.1903	.4232	.2882	-.1415	.0289	.0407
.9	260.	-10.	.0642	.4506	.2814	-.1091	.0267	.0391
.9	265.	-10.	-.0636	.4767	.2341	-.0590	.0157	.0421
.9	270.	-10.	-.1852	.5066	.1761	-.0049	.0041	.0516
.9	275.	-10.	-.3037	.5386	.1502	.0419	.0004	.0595
.9	280.	-10.	-.4183	.5711	.1202	.0872	-.0036	.0627
.9	285.	-10.	-.5152	.5748	.0941	.1356	-.0055	.0598
.9	290.	-10.	-.6019	.5789	.0791	.1727	-.0092	.0543
.9	295.	-10.	-.6844	.5812	.0548	.1904	-.0121	.0436
.9	300.	-10.	-.7619	.5954	.0406	.1954	-.0104	.0337
.9	305.	-10.	-.8309	.5952	.0598	.2030	-.0040	.0298
.9	310.	-10.	-.8967	.5952	.0903	.2195	.0086	.0233
.9	315.	-10.	-.9527	.5872	.1047	.2169	.0154	.0257
.9	320.	-10.	-1.0140	.5716	.1123	.2082	.0196	.0289
.9	325.	-10.	-1.0729	.5560	.1202	.2038	.0242	.0269
.9	330.	-10.	-1.0841	.5190	.1096	.1919	.0260	.0216
.9	335.	-10.	-1.0908	.4848	.0907	.1760	.0260	.0158
.9	340.	-10.	-1.0861	.4472	.0932	.1584	.0262	.0143
.9	345.	-10.	-1.0581	.4102	.1062	.1374	.0283	.0090
.9	350.	-10.	-1.0291	.3588	.1246	.1245	.0320	.0065
.9	355.	-10.	-1.0100	.3121	.1388	.1164	.0385	.0063

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-15.	-1.0343	.3656	.3412	.0453	.0727	.0259
.9	5.	-15.	-1.0431	.2869	.3582	.0933	.0773	.0269
.9	10.	-15.	-.9357	.2245	.3554	.0924	.0746	.0306
.9	15.	-15.	-.8419	.1447	.4177	.1015	.0917	.0357
.9	20.	-15.	-.8718	.0503	.4231	.1134	.0860	.0326
.9	25.	-15.	-.8315	-.0454	.4268	.1331	.0799	.0236
.9	30.	-15.	-.7579	-.1426	.4363	.1483	.0751	.0201
.9	35.	-15.	-.6939	-.2429	.4517	.1553	.0775	.0214
.9	40.	-15.	-.6750	-.3413	.4644	.1670	.0818	.0217
.9	45.	-15.	-.6793	-.4294	.4686	.1819	.0747	.0173
.9	50.	-15.	-.6111	-.5571	.4486	.1979	.0726	.0149
.9	55.	-15.	-.5122	-.6224	.4317	.2062	.0725	.0103
.9	60.	-15.	-.3134	-.6913	.4152	.1925	.0633	.0726
.9	65.	-15.	-.1179	-.7054	.3735	.1674	.0593	.0713
.9	70.	-15.	-.1359	-.7569	.2972	.1612	.0489	.0610
.9	75.	-15.	.0418	-.7344	.2052	.1490	.0360	.0367
.9	80.	-15.	.2478	-.7501	.1411	.1444	.0275	.0209
.9	85.	-15.	.1134	-.7411	.1054	.1504	.0208	.0138
.9	90.	-15.	.0407	-.7149	.1092	.1635	.0105	.0058
.9	95.	-15.	.1403	-.7437	-.0014	.1687	.0071	.0047
.9	100.	-15.	.1320	-.6808	.0153	.1607	.0070	.0103
.9	105.	-15.	.2148	-.6737	.0299	.1585	.0066	.0159
.9	110.	-15.	.2344	-.6024	.0344	.1470	.0059	.0167
.9	115.	-15.	.2915	-.5493	.0345	.1293	.0107	.0119
.9	120.	-15.	.3715	-.7113	.1708	.0937	.0170	.0403
.9	125.	-15.	.4552	-.7013	.2249	.0606	.0169	.0554
.9	130.	-15.	.5269	-.6969	.2774	.0284	.0174	.0593
.9	135.	-15.	.5270	-.6231	.3352	.0045	.0236	.0452
.9	140.	-15.	.6144	-.5249	.3439	.0047	.0325	.0313
.9	145.	-15.	.6279	-.4955	.3741	-.0574	.0425	.0338
.9	150.	-15.	.6232	-.4555	.4172	-.1139	.0434	.0406
.9	155.	-15.	.6987	-.4114	.4581	-.1608	.0549	.0323
.9	160.	-15.	.7502	-.3174	.4643	-.2134	.0351	.0144
.9	165.	-15.	.7212	-.3454	.4294	-.2615	.0489	.0043
.9	170.	-15.	.6112	-.3763	.3993	-.2563	.0000	-.0203
.9	175.	-15.	.7442	-.3222	.3267	-.2713	.0596	-.0259
.9	180.	-15.	.7538	.0185	.2839	-.2887	.0435	-.0100
.9	185.	-15.	.7254	.0245	.2441	-.3186	.0280	.0077
.9	190.	-15.	.7360	-.0385	.2034	-.3528	.0165	.0377
.9	195.	-15.	.7544	-.0487	.2296	-.3685	.0157	.0565
.9	200.	-15.	.7421	-.0185	.2468	-.3734	.0163	.0699
.9	205.	-15.	.7502	.0025	.2789	-.3820	.0150	.0940
.9	210.	-15.	.7456	.0310	.3183	-.3807	.0135	.1207
.9	215.	-15.	.7221	.0778	.3414	-.3782	.0125	.1377
.9	220.	-15.	.6706	.1367	.3570	-.3650	.0099	.1517
.9	225.	-15.	.6125	.1947	.3603	-.3463	.0081	.1541
.9	230.	-15.	.5473	.2510	.3540	-.3175	.0091	.1487
.9	235.	-15.	.4652	.3129	.3807	-.2675	.0114	.1433
.9	240.	-15.	.5294	.2769	.4717	-.2599	.0069	.1579
.9	245.	-15.	.4362	.3236	.4717	-.2096	.0335	.1287
.9	250.	-15.	.3304	.3766	.4534	-.1809	.0449	.1044
.9	255.	-15.	.2047	.4446	.4209	-.1613	.0425	.0872
.9	260.	-15.	.0596	.4892	.3866	-.1239	.0350	.0802
.9	265.	-15.	-.0733	.5191	.3513	-.0784	.0227	.0815
.9	270.	-15.	-.1802	.5379	.3339	-.0280	.0189	.0902
.9	275.	-15.	-.2926	.5559	.2943	.0264	.0141	.0915
.9	280.	-15.	-.4041	.5717	.2497	.0699	.0095	.0942
.9	285.	-15.	-.5002	.5320	.2091	.1029	.0050	.0928
.9	290.	-15.	-.6086	.6021	.1823	.1448	.0019	.0842
.9	295.	-15.	-.6869	.5961	.1645	.1685	-.0015	.0798
.9	300.	-15.	-.7669	.6017	.1532	.1825	-.0004	.0688
.9	305.	-15.	-.8099	.6020	.1528	.1811	.0057	.0552
.9	310.	-15.	-.8792	.5977	.1917	.2080	.0199	.0452
.9	315.	-15.	-.9304	.5837	.2103	.2123	.0304	.0403
.9	320.	-15.	-.9931	.5054	.2222	.2038	.0358	.0431
.9	325.	-15.	-1.0390	.5436	.2246	.1958	.0408	.0437
.9	330.	-15.	-1.0701	.5242	.2204	.1867	.0454	.0409
.9	335.	-15.	-1.0734	.4865	.2193	.1712	.0466	.0400
.9	340.	-15.	-1.0648	.4477	.2314	.1530	.0480	.0393
.9	345.	-15.	-1.0471	.4086	.2390	.1357	.0511	.0346
.9	350.	-15.	-1.0266	.3625	.2549	.1268	.0544	.0308
.9	355.	-15.	-.9995	.3075	.2717	.1202	.0604	.0303

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-30.	-.9358	.3457	.7747	.0365	.1450	.0957
.9	5.	-30.	-.9[illegible]	.2717	.7496	.0941	.1475	.0806
.9	10.	-30.	-.9077	.1837	.7456	.1043	.1452	.0753
.9	15.	-30.	-.8727	.1459	.7325	.1044	.1409	.0705
.9	20.	-30.	-.8244	.0963	.7135	.1036	.1550	.0677
.9	25.	-30.	-.7511	-.0226	.6911	.1122	.1525	.0665
.9	30.	-30.	-.6965	-.1401	.6595	.1184	.1428	.0654
.9	35.	-30.	-.6305	-.2504	.6332	.1414	.1472	.0632
.9	40.	-30.	-.5312	-.3278	.6011	.1609	.1450	.0642
.9	45.	-30.	-.4341	-.4159	.5649	.1852	.1404	.0820
.9	50.	-30.	-.3447	-.4882	.5225	.1926	.1402	.0829
.9	55.	-30.	-.2711	-.5431	.4837	.1968	.1340	.0890
.9	60.	-30.	-.1881	-.5995	.4421	.1934	.1229	.0935
.9	65.	-30.	-.0941	-.6475	.4070	.1815	.1172	.0974
.9	70.	-30.	-.0312	-.6773	.3674	.1743	.1054	.0940
.9	75.	-30.	.0435	-.6984	.3337	.1613	.0996	.0778
.9	80.	-30.	.1114	-.7056	.3038	.1543	.0864	.0600
.9	85.	-30.	.1813	-.6868	.2811	.1439	.0823	.0356
.9	90.	-30.	.2284	-.6312	.2590	.1336	.0790	.0193
.9	95.	-30.	.2707	-.5707	.2413	.1343	.0767	.0109
.9	100.	-30.	.2717	-.5056	.2215	.1264	.0775	.0160
.9	105.	-30.	.2832	-.4415	.1827	.1137	.0761	.0249
.9	110.	-30.	.3535	-.3803	.1458	.1019	.0768	.0257
.9	115.	-30.	.4239	-.3105	.1158	.0818	.0773	.0262
.9	120.	-30.	.5444	-.2499	.0819	.0652	.0673	.0530
.9	125.	-30.	.6431	-.1844	.0532	.0404	.0591	.0647
.9	130.	-30.	.7227	-.1169	.0328	.0158	.0656	.0693
.9	135.	-30.	.7884	-.0512	.0110	-.0251	.0604	.0663
.9	140.	-30.	.8041	-.0386	.0809	-.0620	.0641	.0640
.9	145.	-30.	.7118	-.4803	.6828	-.0905	.0736	.0617
.9	150.	-30.	.7531	-.4144	.0495	-.1246	.0788	.0555
.9	155.	-30.	.7440	-.3427	.5355	-.1525	.0778	.0540
.9	160.	-30.	.8084	-.2559	.0842	-.1842	.0762	.0528
.9	165.	-30.	.8159	-.1702	.0034	-.2095	.0754	.0543
.9	170.	-30.	.8154	-.0871	.5046	-.2237	.0729	.0550
.9	175.	-30.	.7901	-.0217	.5029	-.2492	.0641	.0553

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	180.	-30.	.7827	.0434	.5706	-.2736	.0628	.0547
.9	185.	-30.	.7792	.0422	.5300	-.3082	.0566	.0659
.9	190.	-30.	.7804	.0190	.5248	-.3374	.0445	.0960
.9	195.	-30.	.7755	.0333	.5308	-.3493	.0423	.1076
.9	200.	-30.	.7746	.0466	.5531	-.3535	.0396	.1274
.9	205.	-30.	.7731	.0545	.5869	-.3491	.0345	.1490
.9	210.	-30.	.7633	.0702	.5988	-.3483	.0321	.1702
.9	215.	-30.	.7530	.0890	.6256	-.3484	.0312	.1877
.9	220.	-30.	.7436	.1054	.6450	-.3458	.0313	.2025
.9	225.	-30.	.7032	.1423	.6536	-.3326	.0316	.2099
.9	230.	-30.	.6451	.1883	.7008	-.3115	.0389	.2260
.9	235.	-30.	.5483	.2558	.7917	-.2812	.0560	.2389
.9	240.	-30.	.5841	.2239	.9291	-.2612	.0598	.2895
.9	245.	-30.	.4703	.2869	.9300	-.2198	.0668	.2741
.9	250.	-30.	.3594	.3681	.8587	-.1870	.0678	.2361
.9	255.	-30.	.2514	.4230	.7956	-.1571	.0651	.2152
.9	260.	-30.	.1217	.4782	.7924	-.1284	.0674	.2134
.9	265.	-30.	-.0325	.5244	.7914	-.0840	.0671	.2169
.9	270.	-30.	-.1744	.5561	.7509	-.0417	.0649	.2151
.9	275.	-30.	-.2837	.5792	.7131	-.0086	.0646	.2148
.9	280.	-30.	-.3838	.5853	.6937	.0263	.0648	.2171
.9	285.	-30.	-.4537	.5907	.6851	.0465	.0643	.2156
.9	290.	-30.	-.5208	.5878	.6098	.0657	.0630	.2079
.9	295.	-30.	-.6035	.5976	.6714	.0931	.0649	.2009
.9	300.	-30.	-.6518	.5917	.6699	.1112	.0676	.1915
.9	305.	-30.	-.6944	.5852	.6760	.1265	.0734	.1863
.9	310.	-30.	-.7461	.5788	.6805	.1327	.0798	.1778
.9	315.	-30.	-.8151	.5590	.6712	.1458	.0850	.1640
.9	320.	-30.	-.8662	.5319	.6693	.1524	.0925	.1549
.9	325.	-30.	-.9137	.5063	.6669	.1531	.1000	.1447
.9	330.	-30.	-.9388	.4786	.6599	.1445	.1055	.1320
.9	335.	-30.	-.9510	.4575	.6505	.1299	.1113	.1155
.9	340.	-30.	-.9609	.4304	.6430	.1251	.1156	.1015
.9	345.	-30.	-.9521	.3905	.6527	.1238	.1215	.0950
.9	350.	-30.	-.9368	.3416	.6843	.1234	.1292	.1007
.9	355.	-30.	-.9151	.2877	.7062	.1260	.1368	.1007

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	0.	-45.	-.7435	.3235	1.2115	.0579	.1455	.1907
.9	5.	-45.	-.7714	.2714	1.2112	.0659	.1974	.1810
.9	10.	-45.	-.7345	.2243	1.2007	.0649	.1970	.1717
.9	15.	-45.	-.7157	.1755	1.1847	.0715	.1929	.1628
.9	20.	-45.	-.6811	.1333	1.1690	.0635	.1903	.1538
.9	25.	-45.	-.6236	.0244	1.1765	.0920	.1927	.1474
.9	30.	-45.	-.5943	-.0469	1.1741	.1004	.1883	.1344
.9	35.	-45.	-.5356	-.1300	1.1437	.1182	.1785	.1306
.9	40.	-45.	-.4562	-.2025	1.1539	.1318	.1774	.1237
.9	45.	-45.	-.3911	-.2793	1.1713	.1461	.1798	.1214
.9	50.	-45.	-.2855	-.3487	1.1763	.1624	.1819	.1236
.9	55.	-45.	-.2230	-.4051	1.1574	.1722	.1742	.1330
.9	60.	-45.	-.1555	-.4555	1.1296	.1759	.1674	.1375
.9	65.	-45.	-.0734	-.4960	1.0985	.1736	.1592	.1355
.9	70.	-45.	.0116	-.5263	1.0617	.1602	.1547	.1329
.9	75.	-45.	.1074	-.5496	1.0224	.1522	.1481	.1177
.9	80.	-45.	.1971	-.5595	.9945	.1472	.1491	.1047
.9	85.	-45.	.1758	-.5534	.9494	.1341	.1421	.0902
.9	90.	-45.	.2158	-.5469	.9320	.1284	.1404	.0831
.9	95.	-45.	.2017	-.5565	.9281	.1119	.1406	.0754
.9	100.	-45.	.3237	-.5021	.9119	.1064	.1396	.0705
.9	105.	-45.	.3759	-.5615	.9122	.0863	.1378	.0654
.9	110.	-45.	.4259	-.5426	.8858	.0679	.1367	.0602
.9	115.	-45.	.4847	-.5251	.8760	.0434	.1315	.0529
.9	120.	-45.	.5335	-.5455	.8673	.0657	.1108	.0458
.9	125.	-45.	.5123	-.5534	.8200	.0332	.1029	.0376
.9	130.	-45.	.5508	-.5234	.8224	.0057	.0994	.0315
.9	135.	-45.	.5130	-.4831	.8217	-.0227	.0885	.0313
.9	140.	-45.	.5353	-.4311	.8140	-.0557	.1008	.0465
.9	145.	-45.	.5412	-.3780	.8154	-.0805	.0976	.0499
.9	150.	-45.	.5139	-.3245	.8357	-.1145	.0935	.1014
.9	155.	-45.	.4435	-.2664	.8567	-.1432	.0901	.1096
.9	160.	-45.	.3403	-.2008	.8309	-.1716	.0909	.1035
.9	165.	-45.	.2043	-.1481	.8137	-.2026	.0842	.1159
.9	170.	-45.	.0753	-.1084	.8413	-.2312	.0748	.1219
.9	175.	-45.	-.0501	-.0607	.8923	-.2557	.0725	.1282

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
.9	180.	-45.	.7422	-.0071	.8891	-.2699	.0702	.1382
.9	185.	-45.	.7367	.0379	.8960	-.2857	.0690	.1510
.9	190.	-45.	.7349	.0790	.9057	-.3009	.0662	.1673
.9	195.	-45.	.7277	.0958	.9106	-.3102	.0629	.1851
.9	200.	-45.	.7201	.1167	.9057	-.3145	.0613	.1990
.9	205.	-45.	.7198	.1296	.9192	-.3164	.0612	.2153
.9	210.	-45.	.7027	.1538	.9259	-.3121	.0575	.2309
.9	215.	-45.	.6754	.1683	.9226	-.3011	.0553	.2411
.9	220.	-45.	.6554	.1438	.9418	-.2797	.0608	.2500
.9	225.	-45.	.6227	.1381	.9794	-.2615	.0648	.2706
.9	230.	-45.	.5607	.1768	1.0224	-.2471	.0676	.2894
.9	235.	-45.	.4808	.2241	1.0561	-.2243	.0723	.3002
.9	240.	-45.	.3933	.1730	1.1045	-.2213	.0787	.3459
.9	245.	-45.	.4954	.2249	1.1874	-.1912	.0859	.3466
.9	250.	-45.	.3801	.2828	1.1849	-.1597	.0920	.3402
.9	255.	-45.	.2597	.3370	1.1801	-.1255	.0956	.3348
.9	260.	-45.	.1521	.3843	1.1752	-.0957	.1016	.3248
.9	265.	-45.	.0317	.4324	1.1372	-.0669	.1035	.3054
.9	270.	-45.	-.0656	.4512	1.1156	-.0397	.1041	.3019
.9	275.	-45.	-.1443	.4700	1.1074	-.0196	.1056	.3066
.9	280.	-45.	-.2104	.4830	1.1078	-.0073	.1099	.3091
.9	285.	-45.	-.3001	.5062	1.1146	.0191	.1151	.3060
.9	290.	-45.	-.3550	.5065	1.1158	.0359	.1204	.3041
.9	295.	-45.	-.3962	.5017	1.1397	.0456	.1308	.3037
.9	300.	-45.	-.4569	.4947	1.1503	.0606	.1372	.3017
.9	305.	-45.	-.5179	.4877	1.1548	.0713	.1405	.2985
.9	310.	-45.	-.5734	.4766	1.1607	.0777	.1443	.2925
.9	315.	-45.	-.6386	.4654	1.1635	.0860	.1481	.2851
.9	320.	-45.	-.6728	.4375	1.1520	.0889	.1501	.2768
.9	325.	-45.	-.7068	.4133	1.1547	.0912	.1539	.2691
.9	330.	-45.	-.7354	.3859	1.1469	.0957	.1586	.2546
.9	335.	-45.	-.7460	.3631	1.1295	.0974	.1624	.2371
.9	340.	-45.	-.7437	.3290	1.1323	.0965	.1739	.2205
.9	345.	-45.	-.7464	.3075	1.1227	.0955	.1780	.2089
.9	350.	-45.	-.7464	.2774	1.1346	.0971	.1841	.2065
.9	355.	-45.	-.7446	.2363	1.1442	.1010	.1857	.2057

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_l
1.2	0.	-0.	-1.2474	.3873	.0153	.1231	.0024	.0033
1.2	5.	-0.	-1.2170	.3145	-.0113	.1335	.0036	-.0025
1.2	10.	-0.	-1.1536	.2379	-.0175	.1485	.0011	-.0046
1.2	15.	-0.	-1.1049	.1454	-.0171	.1625	.0005	-.0047
1.2	20.	-0.	-1.0210	.0254	-.0117	.1751	.0020	-.0046
1.2	25.	-0.	-.9370	-.0499	-.0119	.1851	.0030	-.0054
1.2	30.	-0.	-.8433	-.2034	-.0036	.1807	.0027	-.0028
1.2	35.	-0.	-.7410	-.3175	-.0034	.1805	.0008	.0013
1.2	40.	-0.	-.6413	-.4202	-.0058	.1855	-.0023	.0024
1.2	45.	-0.	-.5500	-.5236	-.0022	.1839	.0007	-.0011
1.2	50.	-0.	-.4601	-.6169	-.0034	.1926	.0006	-.0015
1.2	55.	-0.	-.3715	-.6815	-.0066	.1861	-.0003	-.0009
1.2	60.	-0.	-.2933	-.7187	-.0074	.1800	-.0007	-.0004
1.2	65.	-0.	-.2413	-.7549	-.0129	.1769	-.0026	-.0017
1.2	70.	-0.	-.1741	-.7845	-.0148	.1797	-.0018	-.0038
1.2	75.	-0.	-.0954	-.7985	-.0209	.1751	-.0050	-.0036
1.2	80.	-0.	.0034	-.8086	-.0231	.1715	-.0062	.0018
1.2	85.	-0.	.1129	-.7775	-.0195	.1711	-.0021	-.0034
1.2	90.	-0.	.1943	-.7727	-.0164	.1657	-.0015	-.0033
1.2	95.	-0.	.2853	-.7547	-.0153	.1621	-.0013	-.0043
1.2	100.	-0.	.3715	-.7184	-.0179	.1636	-.0029	-.0016
1.2	105.	-0.	.4314	-.6931	-.0619	.1700	-.0105	-.0004
1.2	110.	-0.	.4950	-.6736	.0364	.1692	.0077	.0002
1.2	115.	-0.	.5349	-.6502	-.0211	.1577	-.0025	-.0007
1.2	120.	-0.	.5674	-.6218	-.0033	.1111	-.0013	.0022
1.2	125.	-0.	.5800	-.5928	-.0123	.0820	-.0028	-.0011
1.2	130.	-0.	.5902	-.5674	-.0034	.0576	-.0017	-.0018
1.2	135.	-0.	.5940	-.5495	-.0199	.0248	-.0017	-.0004
1.2	140.	-0.	.5915	-.5242	-.0256	-.0234	-.0004	-.0049
1.2	145.	-0.	.5902	-.5110	-.0265	-.0803	-.0013	-.0050
1.2	150.	-0.	.7382	-.3614	-.0341	-.1414	-.0020	-.0073
1.2	155.	-0.	.8455	-.2539	-.0235	-.2037	-.0020	-.0061
1.2	160.	-0.	.9729	-.1652	-.0139	-.2493	-.0002	-.0166
1.2	165.	-0.	.9470	-.1329	-.0122	-.2859	.0018	-.0069
1.2	170.	-0.	.9774	-.0827	-.0031	-.3295	-.0007	-.0059
1.2	175.	-0.	.9712	-.0356	.0040	-.3224	.0019	-.0043
1.2	180.	-0.	.8482	-.0085	.0094	-.3338	.0030	-.0030
1.2	185.	-0.	.9258	.0049	.0104	-.3570	.0023	-.0001
1.2	190.	-0.	.8292	-.0066	.0148	-.3827	.0034	-.0022
1.2	195.	-0.	.8135	-.0404	.0154	-.3800	.0035	-.0017
1.2	200.	-0.	.7932	-.0139	.0100	-.3803	.0038	-.0039
1.2	205.	-0.	.7849	.0256	.0242	-.3861	.0046	-.0013
1.2	210.	-0.	.7677	.0674	.0037	-.3839	.0027	.0034
1.2	215.	-0.	.7314	.1160	.0044	-.3758	.0012	.0061
1.2	220.	-0.	.6749	.1684	.0131	-.3578	.0018	.0080
1.2	225.	-0.	.6079	.2158	.0137	-.3287	.0008	.0085
1.2	230.	-0.	.5252	.2554	.0164	-.2927	.0019	.0073
1.2	235.	-0.	.4309	.2936	.0040	-.2547	.0012	.0031
1.2	240.	-0.	.4984	.3216	-.0370	-.2337	-.0043	-.0095
1.2	245.	-0.	.4075	.3665	-.0325	-.1939	-.0033	-.0081
1.2	250.	-0.	.3103	.3823	-.0333	-.1525	-.0057	-.0038
1.2	255.	-0.	.2028	.3780	-.0405	-.1003	-.0057	-.0089
1.2	260.	-0.	.0976	.3961	-.0380	-.0659	-.0046	-.0087
1.2	265.	-0.	-.0249	.4561	-.0367	-.0391	-.0032	-.0107
1.2	270.	-0.	-.1397	.5003	-.0313	-.0059	-.0027	-.0103
1.2	275.	-0.	-.2675	.5544	-.0264	.0334	-.0036	-.0127
1.2	280.	-0.	-.3967	.6019	-.0194	.0754	-.0023	-.0121
1.2	285.	-0.	-.5162	.6328	-.0073	.1204	.0012	-.0080
1.2	290.	-0.	-.6450	.6511	-.0426	.1673	-.0022	-.0048
1.2	295.	-0.	-.7507	.6790	-.0551	.1921	-.0047	-.0114
1.2	300.	-0.	-.8441	.6875	-.0482	.2077	-.0039	-.0107
1.2	305.	-0.	-.9237	.6917	-.0529	.2146	-.0033	-.0130
1.2	310.	-0.	-.9921	.6988	-.0284	.2102	.0004	-.0112
1.2	315.	-0.	-1.0799	.6878	-.0376	.2168	.0001	-.0114
1.2	320.	-0.	-1.1697	.6683	-.0350	.2193	-.0005	-.0110
1.2	325.	-0.	-1.2157	.6390	-.0404	.2107	-.0012	-.0106
1.2	330.	-0.	-1.2087	.5873	-.0477	.1990	-.0028	-.0111
1.2	335.	-0.	-1.1694	.5287	-.0325	.1791	-.0038	-.0105
1.2	340.	-0.	-1.1592	.4865	-.0345	.1639	-.0048	-.0089
1.2	345.	-0.	-1.1218	.4278	-.0203	.1495	-.0041	-.0070
1.2	350.	-0.	-1.0717	.3733	-.0031	.1341	-.0015	-.0034
1.2	355.	-0.	-1.0261	.3200	-.0591	.1173	-.0025	-.0153

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-5.	-1.2470	.3847	.1352	.1296	.0297	.0057
1.2	5.	-5.	-1.2031	.3123	.1453	.1342	.0289	.0034
1.2	10.	-5.	-1.1638	.2394	.1565	.1463	.0289	.0049
1.2	15.	-5.	-1.0940	.1635	.1524	.1631	.0280	.0069
1.2	20.	-5.	-1.0218	.0865	.1597	.1721	.0263	.0099
1.2	25.	-5.	-.9335	-.0794	.1662	.1784	.0254	.0161
1.2	30.	-5.	-.8444	-.2053	.1663	.1843	.0215	.0198
1.2	35.	-5.	-.7340	-.3129	.1764	.1888	.0265	.0232
1.2	40.	-5.	-.6249	-.4211	.1843	.1909	.0251	.0234
1.2	45.	-5.	-.5045	-.5195	.1827	.1974	.0238	.0298
1.2	50.	-5.	-.4765	-.6077	.1882	.2020	.0248	.0331
1.2	55.	-5.	-.3850	-.6881	.1880	.2021	.0287	.0338
1.2	60.	-5.	-.2132	-.7548	.1977	.1989	.0308	.0324
1.2	65.	-5.	-.2496	-.7208	.1758	.1940	.0313	.0240
1.2	70.	-5.	-.1037	-.7496	.1631	.1726	.0234	.0224
1.2	75.	-5.	-.0541	-.7867	.1463	.1729	.0274	.0238
1.2	80.	-5.	.0365	-.8137	.1342	.1737	.0274	.0163
1.2	85.	-5.	.1270	-.8025	.0863	.1715	.0165	.0102
1.2	90.	-5.	.1588	-.7974	.1459	.1644	.0117	.0104
1.2	95.	-5.	.1939	-.7409	.0413	.1537	.0085	.0095
1.2	100.	-5.	.2215	-.7259	.0342	.1574	.0061	.0087
1.2	105.	-5.	.2129	-.6925	-.0204	.1676	-.0040	.0091
1.2	110.	-5.	.2421	-.6855	-.0501	.1641	-.0086	.0110
1.2	115.	-5.	.2430	-.6711	-.0385	.1497	-.0063	.0136
1.2	120.	-5.	.2752	-.7594	.1114	.1029	.0053	.0307
1.2	125.	-5.	.2474	-.7337	.1243	.0673	.0041	.0371
1.2	130.	-5.	.2032	-.7641	.1535	.0454	.0079	.0348
1.2	135.	-5.	.1523	-.7472	.1442	.0277	.0112	.0163
1.2	140.	-5.	.0123	-.6744	.1269	-.0371	.0133	.0189
1.2	145.	-5.	.7139	-.5297	.1333	-.0935	.0185	.0168
1.2	150.	-5.	.0042	-.3859	.1631	-.1437	.0220	.0162
1.2	155.	-5.	.0700	-.2713	.1409	-.2031	.0277	.0106
1.2	160.	-5.	.4948	-.2011	.1772	-.2522	.0230	.0031
1.2	165.	-5.	.3542	-.1349	.1413	-.2807	.0212	.0039
1.2	170.	-5.	.9108	-.1354	.1612	-.3003	.0242	-.0086
1.2	175.	-5.	.4327	-.0575	.1556	-.3107	.0275	-.0040
1.2	180.	-5.	.8758	-.0211	.1368	-.3279	.0227	-.0040
1.2	185.	-5.	.8389	.0088	.1176	-.3465	.0204	-.0023
1.2	190.	-5.	.8125	-.0245	.1118	-.3736	.0127	.0175
1.2	195.	-5.	.7981	-.0246	.1097	-.3766	.0077	.0258
1.2	200.	-5.	.7873	-.0039	.1106	-.3779	.0036	.0347
1.2	205.	-5.	.7749	.0304	.1230	-.3806	.0028	.0428
1.2	210.	-5.	.7596	.0691	.1360	-.3785	.0015	.0575
1.2	215.	-5.	.7191	.1157	.1289	-.3706	-.0010	.0705
1.2	220.	-5.	.6692	.1561	.1290	-.3538	-.0023	.0714
1.2	225.	-5.	.6068	.1986	.1273	-.3306	-.0020	.0688
1.2	230.	-5.	.5260	.2470	.1234	-.2956	-.0013	.0614
1.2	235.	-5.	.4369	.2787	.1195	-.2553	-.0007	.0546
1.2	240.	-5.	.4951	.3127	.1294	-.2340	-.0034	.0443
1.2	245.	-5.	.4059	.3615	.1138	-.1953	.0050	.0260
1.2	250.	-5.	.3128	.3858	.1138	-.1514	.0090	.0152
1.2	255.	-5.	.2055	.3954	.1099	-.1058	.0121	.0092
1.2	260.	-5.	.0946	.4313	.1128	-.0805	.0151	.0006
1.2	265.	-5.	-.0259	.4716	.1173	-.0487	.0169	.0020
1.2	270.	-5.	-.1584	.5521	.1166	-.0146	.0173	.0113
1.2	275.	-5.	-.3067	.6011	.1135	.0229	.0114	.0222
1.2	280.	-5.	-.4383	.6433	.0998	.0715	.0045	.0269
1.2	285.	-5.	-.5523	.6589	.0799	.1240	.0023	.0253
1.2	290.	-5.	-.6561	.6683	.0842	.1669	.0038	.0238
1.2	295.	-5.	-.7607	.6835	.0799	.1911	.0044	.0213
1.2	300.	-5.	-.8513	.6961	.0645	.2040	.0034	.0185
1.2	305.	-5.	-.9456	.6988	.0313	.2191	.0021	.0132
1.2	310.	-5.	-1.0250	.7016	.0229	.2199	.0065	.0045
1.2	315.	-5.	-1.0764	.6834	.0591	.2204	.0164	.0054
1.2	320.	-5.	-1.1518	.6547	.0639	.2255	.0166	.0032
1.2	325.	-5.	-1.1942	.6151	.0598	.2204	.0150	.0036
1.2	330.	-5.	-1.2075	.5810	.0554	.2041	.0161	.0047
1.2	335.	-5.	-1.1986	.5405	.0438	.1857	.0151	.0031
1.2	340.	-5.	-1.1703	.4998	.0275	.1603	.0142	-.0045
1.2	345.	-5.	-1.1223	.4407	.0314	.1432	.0126	-.0022
1.2	350.	-5.	-1.0715	.3823	.0410	.1291	.0139	-.0038
1.2	355.	-5.	-1.0227	.3250	.0385	.1156	.0159	-.0026

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-10.	-1.2252	.3834	.2650	.1303	.0528	.0182
1.2	5.	-10.	-1.1804	.3121	.2773	.1332	.0536	.0225
1.2	10.	-10.	-1.1381	.2250	.2888	.1452	.0534	.0231
1.2	15.	-10.	-1.0866	.1344	.2943	.1536	.0507	.0186
1.2	20.	-10.	-1.0344	.0303	.3155	.1705	.0493	.0274
1.2	25.	-10.	-.9237	-.0795	.3355	.1774	.0472	.0356
1.2	30.	-10.	-.8405	-.1997	.3519	.1873	.0454	.0359
1.2	35.	-10.	-.7485	-.3142	.3139	.1930	.0432	.0346
1.2	40.	-10.	-.6547	-.4217	.3360	.1971	.0474	.0392
1.2	45.	-10.	-.5547	-.5229	.3151	.2012	.0436	.0449
1.2	50.	-10.	-.4732	-.6065	.3159	.2112	.0452	.0493
1.2	55.	-10.	-.3989	-.6934	.3204	.2114	.0456	.0513
1.2	60.	-10.	-.3111	-.7662	.3223	.2097	.0471	.0527
1.2	65.	-10.	-.2365	-.8330	.3136	.1856	.0493	.0443
1.2	70.	-10.	-.1284	-.7274	.2884	.1674	.0449	.0396
1.2	75.	-10.	-.0330	-.7931	.2611	.1705	.0450	.0355
1.2	80.	-10.	.0438	-.8099	.2240	.1705	.0434	.0237
1.2	85.	-10.	.1546	-.8321	.1541	.1573	.0311	.0233
1.2	90.	-10.	.1771	-.7878	.1013	.1677	.0200	.0112
1.2	95.	-10.	.1979	-.7403	.0311	.1620	.0136	.0106
1.2	100.	-10.	.2017	-.7139	.0873	.1639	.0155	.0143
1.2	105.	-10.	.2204	-.6946	.0444	.1674	.0180	.0148
1.2	110.	-10.	.2547	-.6853	.3146	.1596	.0025	.0138
1.2	115.	-10.	.3129	-.6742	.3092	.1426	.0024	.0149
1.2	120.	-10.	.4897	-.7764	.2191	.0815	.0118	.0546
1.2	125.	-10.	.5816	-.7777	.2546	.0441	.0125	.0633
1.2	130.	-10.	.6556	-.7712	.2898	.0126	.0154	.0640
1.2	135.	-10.	.5484	-.7369	.3027	.0374	.0138	.0446
1.2	140.	-10.	.6505	-.6714	.3102	-.0545	.0261	.0503
1.2	145.	-10.	.7546	-.5535	.3431	-.1057	.0386	.0534
1.2	150.	-10.	.8330	-.4235	.3305	-.1527	.0459	.0462
1.2	155.	-10.	.9074	-.3207	.4162	-.2021	.0543	.0345
1.2	160.	-10.	.9272	-.2205	.4163	-.2511	.0560	.0223
1.2	165.	-10.	.9344	-.1567	.3374	-.2767	.0518	.0132
1.2	170.	-10.	.9735	-.1593	.3556	-.2844	.0577	-.0053
1.2	175.	-10.	.9444	-.0461	.2951	-.3033	.0497	-.0047
1.2	180.	-10.	.9006	-.0266	.2677	-.3162	.0426	.0044
1.2	185.	-10.	.8630	.0113	.2567	-.3363	.0343	.0173
1.2	190.	-10.	.8329	-.0193	.2209	-.3729	.0185	.0437
1.2	195.	-10.	.8136	-.0048	.2317	-.3830	.0143	.0596
1.2	200.	-10.	.8023	.0066	.2367	-.3864	.0094	.0756
1.2	205.	-10.	.7833	.0391	.2625	-.3872	.0092	.0889
1.2	210.	-10.	.7656	.0731	.2718	-.3808	.0050	.1071
1.2	215.	-10.	.7209	.1141	.2726	-.3659	.0011	.1194
1.2	220.	-10.	.6707	.1483	.2757	-.3529	-.0013	.1281
1.2	225.	-10.	.6056	.1878	.2639	-.3257	-.0009	.1262
1.2	230.	-10.	.5342	.2300	.2456	-.2924	.0024	.1139
1.2	235.	-10.	.4484	.2676	.2236	-.2535	.0044	.0967
1.2	240.	-10.	.5084	.3011	.2936	-.2390	.0002	.0912
1.2	245.	-10.	.4132	.3512	.2849	-.1940	.0219	.0631
1.2	250.	-10.	.3076	.3923	.2699	-.1581	.0280	.0425
1.2	255.	-10.	.2067	.4317	.2586	-.1295	.0320	.0302
1.2	260.	-10.	.0883	.4777	.2620	-.1084	.0351	.0251
1.2	265.	-10.	-.0397	.5217	.2633	-.0736	.0329	.0300
1.2	270.	-10.	-.1741	.5714	.2717	-.0307	.0312	.0406
1.2	275.	-10.	-.3079	.6128	.2605	.0160	.0241	.0507
1.2	280.	-10.	-.4355	.6517	.2292	.0547	.0154	.0581
1.2	285.	-10.	-.5525	.6721	.2020	.1031	.0120	.0592
1.2	290.	-10.	-.6709	.6866	.1821	.1504	.0103	.0563
1.2	295.	-10.	-.7631	.6881	.1723	.1818	.0083	.0558
1.2	300.	-10.	-.8554	.6887	.1627	.2030	.0107	.0505
1.2	305.	-10.	-.9383	.6909	.1466	.2189	.0125	.0405
1.2	310.	-10.	-1.0137	.6900	.1497	.2270	.0216	.0297
1.2	315.	-10.	-1.0849	.6851	.1631	.2231	.0298	.0253
1.2	320.	-10.	-1.1318	.6510	.1686	.2218	.0357	.0202
1.2	325.	-10.	-1.1664	.6170	.1707	.2091	.0357	.0204
1.2	330.	-10.	-1.1835	.5750	.1658	.1982	.0363	.0162
1.2	335.	-10.	-1.1811	.5355	.1592	.1882	.0365	.0140
1.2	340.	-10.	-1.1521	.4933	.1426	.1605	.0356	.0093
1.2	345.	-10.	-1.1065	.4395	.1448	.1429	.0353	.0091
1.2	350.	-10.	-1.0715	.3785	.1498	.1350	.0361	.0107
1.2	355.	-10.	-1.0200	.3174	.1478	.1242	.0380	.0093

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-15.	-1.1977	.3651	.4227	.1293	.0813	.0386
1.2	5.	-15.	-1.1716	.2475	.4339	.1374	.0806	.0407
1.2	10.	-15.	-1.1231	.2135	.4550	.1491	.0812	.0449
1.2	15.	-15.	-1.0775	.1237	.4672	.1530	.0795	.0434
1.2	20.	-15.	-1.0307	.0123	.4786	.1752	.0763	.0463
1.2	25.	-15.	-.9146	-.0935	.4822	.1858	.0727	.0495
1.2	30.	-15.	-.8324	-.2113	.4864	.1938	.0689	.0492
1.2	35.	-15.	-.7335	-.3038	.4858	.1834	.0715	.0430
1.2	40.	-15.	-.6477	-.4065	.4978	.1919	.0714	.0502
1.2	45.	-15.	-.5624	-.5092	.4844	.2021	.0715	.0513
1.2	50.	-15.	-.4411	-.5894	.4656	.2116	.0702	.0543
1.2	55.	-15.	-.3428	-.6848	.4677	.2155	.0700	.0583
1.2	60.	-15.	-.3059	-.6575	.4049	.2047	.0661	.0638
1.2	65.	-15.	-.2193	-.6712	.4027	.1852	.0669	.0656
1.2	70.	-15.	-.1284	-.7317	.4323	.1721	.0626	.0670
1.2	75.	-15.	-.0263	-.7773	.3779	.1673	.0587	.0609
1.2	80.	-15.	.0626	-.8134	.3375	.1644	.0549	.0402
1.2	85.	-15.	.1151	-.7935	.2431	.1616	.0415	.0249
1.2	90.	-15.	.1792	-.7599	.1986	.1596	.0340	.0149
1.2	95.	-15.	.2079	-.7494	.1471	.1569	.0260	.0083
1.2	100.	-15.	.2404	-.7268	.1361	.1575	.0233	.0104
1.2	105.	-15.	.2744	-.7142	.1153	.1577	.0183	.0132
1.2	110.	-15.	.3139	-.6960	.1126	.1484	.0169	.0154
1.2	115.	-15.	.3523	-.6749	.1311	.1257	.0194	.0227
1.2	120.	-15.	.5005	-.7755	.3427	.0634	.0264	.0657
1.2	125.	-15.	.6375	-.7711	.3437	.0209	.0258	.0729
1.2	130.	-15.	.7030	-.7522	.4338	-.0209	.0311	.0782
1.2	135.	-15.	.6116	-.7201	.5100	.0047	.0340	.0827
1.2	140.	-15.	.7013	-.6677	.5247	-.0714	.0455	.0795
1.2	145.	-15.	.7335	-.5767	.5516	-.1188	.0545	.0805
1.2	150.	-15.	.6775	-.4713	.5867	-.1593	.0630	.0605
1.2	155.	-15.	.6368	-.3835	.6372	-.1954	.0696	.0545
1.2	160.	-15.	.6503	-.2735	.6355	-.2302	.0708	.0403
1.2	165.	-15.	.6460	-.2353	.5645	-.2645	.0793	.0313
1.2	170.	-15.	.6365	-.1957	.4908	-.2702	.0749	.0176
1.2	175.	-15.	.6459	-.1115	.4447	-.2854	.0674	.0207
1.2	180.	-15.	.9093	-.0449	.4282	-.3092	.0583	.0326
1.2	185.	-15.	.8853	.0057	.4075	-.3339	.0468	.0450
1.2	190.	-15.	.8542	.0060	.3687	-.3679	.0333	.0644
1.2	195.	-15.	.8244	.0139	.3634	-.3832	.0222	.0899
1.2	200.	-15.	.8095	.0353	.3781	-.3938	.0189	.1109
1.2	205.	-15.	.7955	.0578	.3998	-.3934	.0150	.1360
1.2	210.	-15.	.7594	.0924	.4007	-.3822	.0114	.1497
1.2	215.	-15.	.7181	.1208	.3960	-.3644	.0079	.1589
1.2	220.	-15.	.6699	.1476	.3924	-.3451	.0069	.1659
1.2	225.	-15.	.6151	.1786	.3689	-.3176	.0082	.1585
1.2	230.	-15.	.5479	.2176	.3588	-.2907	.0140	.1488
1.2	235.	-15.	.4816	.2635	.3381	-.2584	.0123	.1364
1.2	240.	-15.	.4255	.2897	.4594	-.2344	.0214	.1312
1.2	245.	-15.	.4256	.3393	.4557	-.1971	.0380	.1058
1.2	250.	-15.	.3141	.4052	.4385	-.1716	.0495	.0841
1.2	255.	-15.	.2088	.4664	.4177	-.1529	.0507	.0700
1.2	260.	-15.	.0842	.5234	.4176	-.1281	.0530	.0671
1.2	265.	-15.	-.0572	.5707	.4150	-.0881	.0485	.0700
1.2	270.	-15.	-.1842	.6078	.3931	-.0452	.0384	.0772
1.2	275.	-15.	-.3145	.6347	.3978	.0031	.0365	.0852
1.2	280.	-15.	-.4315	.6511	.3726	.0505	.0297	.0922
1.2	285.	-15.	-.5437	.6682	.3401	.0893	.0240	.0957
1.2	290.	-15.	-.6625	.6909	.3201	.1326	.0224	.0931
1.2	295.	-15.	-.7678	.6998	.3082	.1672	.0228	.0883
1.2	300.	-15.	-.8613	.7039	.3027	.1932	.0254	.0812
1.2	305.	-15.	-.9373	.6953	.3106	.2179	.0315	.0725
1.2	310.	-15.	-.9908	.6780	.2992	.2229	.0391	.0563
1.2	315.	-15.	-1.0522	.6719	.2877	.2175	.0456	.0452
1.2	320.	-15.	-1.1047	.6462	.2916	.2092	.0508	.0411
1.2	325.	-15.	-1.1440	.6106	.2870	.2026	.0551	.0372
1.2	330.	-15.	-1.1613	.5754	.2916	.1882	.0583	.0349
1.2	335.	-15.	-1.1634	.5379	.2780	.1764	.0588	.0319
1.2	340.	-15.	-1.1340	.4882	.2714	.1618	.0578	.0302
1.2	345.	-15.	-1.0901	.4294	.2655	.1468	.0576	.0289
1.2	350.	-15.	-1.0524	.3722	.2682	.1354	.0581	.0295
1.2	355.	-15.	-1.0090	.3062	.2745	.1305	.0584	.0289

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-30.	-1.0750	.3345	.0685	.1209	.1493	.1135
1.2	5.	-30.	-1.0536	.2649	.3710	.1321	.1495	.1108
1.2	10.	-30.	-1.0323	.1960	.8764	.1481	.1497	.1129
1.2	15.	-30.	-.9848	.1189	.9005	.1473	.1479	.1144
1.2	20.	-30.	-.9253	.0419	.9421	.1482	.1499	.1138
1.2	25.	-30.	-.8531	-.0423	.9285	.1528	.1436	.1083
1.2	30.	-30.	-.7611	-.1449	.9121	.1588	.1387	.1004
1.2	35.	-30.	-.6646	-.2454	.8948	.1633	.1363	.0935
1.2	40.	-30.	-.5454	-.3432	.8803	.1855	.1344	.0943
1.2	45.	-30.	-.5038	-.4251	.8316	.1946	.1316	.1027
1.2	50.	-30.	-.4159	-.4992	.8783	.1930	.1296	.1014
1.2	55.	-30.	-.3304	-.5563	.8544	.1953	.1268	.1007
1.2	60.	-30.	-.2636	-.6042	.8268	.1899	.1221	.1010
1.2	65.	-30.	-.1752	-.6542	.7890	.1829	.1183	.0964
1.2	70.	-30.	-.0740	-.6955	.7393	.1723	.1131	.0869
1.2	75.	-30.	.0152	-.7275	.6866	.1653	.1069	.0748
1.2	80.	-30.	.0832	-.7505	.6308	.1521	.1006	.0529
1.2	85.	-30.	.1503	-.7324	.5913	.1448	.0961	.0380
1.2	90.	-30.	.2143	-.7194	.5656	.1330	.0941	.0282
1.2	95.	-30.	.2739	-.7079	.5440	.1240	.0903	.0185
1.2	100.	-30.	.3085	-.6863	.5270	.1218	.0873	.0137
1.2	105.	-30.	.3135	-.6697	.5255	.1153	.0857	.0178
1.2	110.	-30.	.3726	-.6543	.5228	.1009	.0837	.0212
1.2	115.	-30.	.4374	-.6367	.5354	.0826	.0822	.0277
1.2	120.	-30.	.4959	-.7201	.7117	.0402	.0801	.0738
1.2	125.	-30.	.5859	-.7095	.7335	.0017	.0766	.0843
1.2	130.	-30.	.6731	-.6867	.7578	-.0355	.0784	.0847
1.2	135.	-30.	.7424	-.6489	.7709	-.0736	.0792	.0829
1.2	140.	-30.	.8141	-.6170	.8125	-.1093	.0855	.0890
1.2	145.	-30.	.8839	-.5889	.8495	-.1443	.0902	.0924
1.2	150.	-30.	.9190	-.5281	.8563	-.1775	.0804	.0845
1.2	155.	-30.	.9356	-.4467	.8526	-.1984	.0824	.0841
1.2	160.	-30.	.9295	-.3567	.8420	-.2154	.0929	.0832
1.2	165.	-30.	.9307	-.2691	.8336	-.2378	.0953	.0841
1.2	170.	-30.	.9364	-.1889	.7850	-.2651	.0926	.0804
1.2	175.	-30.	.9239	-.1193	.7652	-.2865	.0847	.0856
1.2	180.	-30.	.9018	-.0515	.7254	-.3092	.0783	.0963
1.2	185.	-30.	.8836	.0002	.6995	-.3297	.0689	.1098
1.2	190.	-30.	.8600	.0461	.6939	-.3493	.0619	.1242
1.2	195.	-30.	.8323	.0788	.6737	-.3684	.0537	.1359
1.2	200.	-30.	.7983	.1024	.6562	-.3858	.0484	.1511
1.2	205.	-30.	.7810	.1205	.6655	-.3572	.0448	.1703
1.2	210.	-30.	.7633	.1332	.6793	-.3493	.0413	.1902
1.2	215.	-30.	.7355	.1415	.6806	-.3384	.0378	.2021
1.2	220.	-30.	.7075	.1588	.6834	-.3297	.0369	.2076
1.2	225.	-30.	.6610	.1748	.6747	-.3113	.0322	.2159
1.2	230.	-30.	.6010	.1999	.6910	-.2853	.0365	.2221
1.2	235.	-30.	.5278	.2435	.7572	-.2613	.0483	.2330
1.2	240.	-30.	.5661	.2571	.8949	-.2425	.0704	.2552
1.2	245.	-30.	.4432	.3206	.8987	-.2062	.0757	.2432
1.2	250.	-30.	.3372	.4007	.8499	-.1807	.0785	.2144
1.2	255.	-30.	.2139	.4540	.8249	-.1553	.0770	.2049
1.2	260.	-30.	.0884	.5072	.8440	-.1257	.0774	.2074
1.2	265.	-30.	-.0580	.5610	.8419	-.0891	.0767	.2099
1.2	270.	-30.	-.1871	.5945	.8260	-.0551	.0756	.2135
1.2	275.	-30.	-.3181	.6331	.8116	-.0178	.0754	.2168
1.2	280.	-30.	-.4229	.6477	.8003	.0190	.0773	.2167
1.2	285.	-30.	-.5215	.6637	.8089	.0583	.0802	.2160
1.2	290.	-30.	-.6155	.6773	.8212	.0879	.0844	.2111
1.2	295.	-30.	-.6916	.6844	.8234	.1161	.0880	.2072
1.2	300.	-30.	-.7601	.6745	.8187	.1432	.0905	.2026
1.2	305.	-30.	-.8164	.6581	.8058	.1639	.0936	.1934
1.2	310.	-30.	-.8656	.6316	.7916	.1767	.0968	.1823
1.2	315.	-30.	-.9149	.5998	.7672	.1828	.0993	.1695
1.2	320.	-30.	-.9453	.5720	.7465	.1718	.1062	.1556
1.2	325.	-30.	-.9756	.5440	.7355	.1582	.1113	.1425
1.2	330.	-30.	-.9933	.5112	.7142	.1523	.1147	.1321
1.2	335.	-30.	-.9956	.4728	.6868	.1388	.1164	.1194
1.2	340.	-30.	-.9801	.4348	.6776	.1312	.1188	.1103
1.2	345.	-30.	-.9795	.3927	.6718	.1328	.1197	.1067
1.2	350.	-30.	-.9585	.3408	.6743	.1335	.1225	.1052
1.2	355.	-30.	-.9264	.2826	.6893	.1348	.1262	.1070

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.2	0.	-45.	-.8563	.3027	1.2793	.0757	.1366	.2159
1.2	5.	-45.	-.8456	.2525	1.2505	.0853	.1457	.2012
1.2	10.	-45.	-.8035	.2114	1.2374	.0965	.1525	.1947
1.2	15.	-45.	-.7394	.1415	1.2115	.1073	.1641	.1808
1.2	20.	-45.	-.7510	.0397	1.2085	.1146	.1686	.1751
1.2	25.	-45.	-.6857	.0213	1.1997	.1104	.1691	.1670
1.2	30.	-45.	-.6282	-.0547	1.1861	.1251	.1856	.1569
1.2	35.	-45.	-.5631	-.1290	1.1632	.1374	.1825	.1478
1.2	40.	-45.	-.4939	-.2047	1.1747	.1426	.1740	.1427
1.2	45.	-45.	-.4071	-.2785	1.1636	.1521	.1742	.1409
1.2	50.	-45.	-.3441	-.3535	1.1728	.1627	.1730	.1483
1.2	55.	-45.	-.2646	-.4077	1.1580	.1644	.1623	.1465
1.2	60.	-45.	-.1945	-.4493	1.1111	.1673	.1619	.1463
1.2	65.	-45.	-.1149	-.4947	1.0746	.1593	.1538	.1394
1.2	70.	-45.	-.0353	-.5259	1.0344	.1523	.1485	.1268
1.2	75.	-45.	.0491	-.5553	.9941	.1424	.1418	.1162
1.2	80.	-45.	.1032	-.5698	.9727	.1365	.1443	.1021
1.2	85.	-45.	.1501	-.5729	.9569	.1295	.1423	.0841
1.2	90.	-45.	.1935	-.5711	.9021	.1210	.1373	.0719
1.2	95.	-45.	.2438	-.5723	.8833	.1092	.1348	.0703
1.2	100.	-45.	.3333	-.5763	.8763	.0959	.1332	.0683
1.2	105.	-45.	.3589	-.5697	.8705	.0766	.1318	.0644
1.2	110.	-45.	.4140	-.5555	.8651	.0584	.1240	.0652
1.2	115.	-45.	.4772	-.5312	.8669	.0340	.1269	.0819
1.2	120.	-45.	.4211	-.6143	1.0457	.0333	.1268	.1175
1.2	125.	-45.	.4371	-.5980	1.0424	.0037	.1183	.1234
1.2	130.	-45.	.5443	-.5788	1.0423	-.0296	.1123	.1242
1.2	135.	-45.	.6097	-.5445	1.0364	-.0591	.1037	.1233
1.2	140.	-45.	.6023	-.5055	1.0307	-.0879	.1083	.1232
1.2	145.	-45.	.7054	-.4503	1.0201	-.1166	.1052	.1252
1.2	150.	-45.	.7344	-.4036	1.0091	-.1411	.1027	.1254
1.2	155.	-45.	.7634	-.3525	1.0180	-.1605	.1049	.1295
1.2	160.	-45.	.7775	-.2803	1.0124	-.1918	.0949	.1335
1.2	165.	-45.	.7934	-.2220	1.0005	-.2145	.0948	.1445
1.2	170.	-45.	.8041	-.1647	.9878	-.2377	.0917	.1529
1.2	175.	-45.	.8136	-.1101	.9748	-.2622	.0884	.1631
1.2	180.	-45.	.8122	-.0591	.9632	-.2821	.0854	.1615
1.2	185.	-45.	.8070	-.0080	.9589	-.2995	.0825	.1708
1.2	190.	-45.	.7878	.0433	.9579	-.3083	.0784	.1835
1.2	195.	-45.	.7643	.0866	.9581	-.3139	.0734	.1973
1.2	200.	-45.	.7355	.1161	.9586	-.3133	.0686	.2125
1.2	205.	-45.	.7024	.1443	.9466	-.3113	.0629	.2240
1.2	210.	-45.	.6736	.1643	.9496	-.3018	.0602	.2375
1.2	215.	-45.	.6530	.1764	.9482	-.2919	.0568	.2515
1.2	220.	-45.	.6167	.1874	.9403	-.2744	.0555	.2563
1.2	225.	-45.	.5719	.2004	.9529	-.2523	.0610	.2593
1.2	230.	-45.	.5163	.2233	.9983	-.2332	.0672	.2732
1.2	235.	-45.	.4415	.2573	1.0237	-.2092	.0732	.2785
1.2	240.	-45.	.3357	.2089	1.1366	-.2044	.0874	.3176
1.2	245.	-45.	.4342	.2666	1.1490	-.1769	.0919	.3179
1.2	250.	-45.	.3209	.3233	1.1478	-.1468	.0949	.3133
1.2	255.	-45.	.2063	.3734	1.1309	-.1175	.0964	.3052
1.2	260.	-45.	.0981	.4182	1.1047	-.0910	.0968	.2964
1.2	265.	-45.	-.0026	.4557	1.1025	-.0680	.1000	.2972
1.2	270.	-45.	-.0983	.4817	1.1030	-.0446	.1029	.3017
1.2	275.	-45.	-.1879	.5096	1.1013	-.0240	.1053	.3038
1.2	280.	-45.	-.2717	.5326	1.1047	-.0052	.1100	.3023
1.2	285.	-45.	-.3434	.5473	1.1107	.0122	.1145	.2979
1.2	290.	-45.	-.4061	.5491	1.1284	.0316	.1224	.2954
1.2	295.	-45.	-.4639	.5435	1.1473	.0510	.1290	.2956
1.2	300.	-45.	-.5297	.5370	1.1609	.0716	.1361	.2928
1.2	305.	-45.	-.5809	.5217	1.1610	.0822	.1401	.2883
1.2	310.	-45.	-.6353	.5091	1.1472	.0882	.1423	.2780
1.2	315.	-45.	-.6852	.4857	1.1376	.0940	.1446	.2707
1.2	320.	-45.	-.7226	.4550	1.1200	.0987	.1438	.2661
1.2	325.	-45.	-.7504	.4272	1.1052	.1012	.1453	.2575
1.2	330.	-45.	-.7663	.4023	1.0875	.1016	.1487	.2428
1.2	335.	-45.	-.7778	.3766	1.0635	.1029	.1517	.2268
1.2	340.	-45.	-.7832	.3507	1.0501	.1049	.1539	.2159
1.2	345.	-45.	-.7709	.3118	1.0531	.1045	.1633	.2045
1.2	350.	-45.	-.7611	.2762	1.0519	.1056	.1662	.1967
1.2	355.	-45.	-.7530	.2347	1.0575	.1082	.1681	.1939

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.6	0.	-0.	-1.2343	.3629	.0074	.1542	.0034	-.0022
1.6	5.	-0.	-1.2549	.3308	.0345	.1552	.0036	-.0024
1.6	10.	-0.	-1.2111	.2215	.0351	.1401	.0034	-.0025
1.6	15.	-0.	-1.1348	.1262	.0033	.1403	.0031	-.0031
1.6	20.	-0.	-1.0342	.0095	.0342	.1441	.0039	-.0035
1.6	25.	-0.	-.9249	-.1082	.0343	.1428	.0033	-.0027
1.6	30.	-0.	-.8265	-.2174	.0334	.1440	.0034	.0030
1.6	35.	-0.	-.7252	-.3356	.0124	.1776	.0029	.0012
1.6	40.	-0.	-.6218	-.4164	.0043	.1737	.0012	.0020
1.6	45.	-0.	-.5342	-.5015	.0144	.1680	.0023	.0039
1.6	50.	-0.	-.4435	-.5866	.0075	.1651	.0020	.0015
1.6	55.	-0.	-.3635	-.6567	.0079	.1600	.0018	.0025
1.6	60.	-0.	-.2963	-.6956	.0093	.1615	.0012	.0031
1.6	65.	-0.	-.2330	-.6812	.0057	.1629	-.0000	.0030
1.6	70.	-0.	-.1741	-.7360	-.0061	.1717	-.0007	.0008
1.6	75.	-0.	-.1344	-.7656	-.0032	.1654	-.0015	-.0004
1.6	80.	-0.	.0213	-.8031	-.0102	.1704	-.0036	-.0015
1.6	85.	-0.	.1179	-.8052	-.0073	.1694	-.0005	-.0019
1.6	90.	-0.	.1849	-.8072	-.0057	.1644	.0009	-.0035
1.6	95.	-0.	.2396	-.8081	-.0103	.1635	-.0013	-.0034
1.6	100.	-0.	.2724	-.7874	-.0143	.1597	-.0019	-.0026
1.6	105.	-0.	.3012	-.7771	-.0150	.1571	-.0031	-.0033
1.6	110.	-0.	.3357	-.7664	-.0160	.1495	-.0036	-.0003
1.6	115.	-0.	.3641	-.7261	-.0108	.1439	.0038	-.0037
1.6	120.	-0.	.3902	-.7472	-.0058	.0959	-.0025	.0012
1.6	125.	-0.	.3759	-.7877	-.0034	.0584	-.0008	.0002
1.6	130.	-0.	.3242	-.7844	-.0064	.0554	-.0024	.0006
1.6	135.	-0.	.2511	-.7443	-.0177	.0140	-.0027	-.0010
1.6	140.	-0.	.1749	-.6865	-.0173	-.0357	-.0024	-.0021
1.6	145.	-0.	.1447	-.6560	-.0204	-.0884	-.0021	-.0035
1.6	150.	-0.	.1250	-.4195	-.0212	-.1505	-.0027	-.0031
1.6	155.	-0.	.0805	-.3219	-.0249	-.2152	-.0023	-.0026
1.6	160.	-0.	.0238	-.2537	-.0191	-.2577	-.0012	-.0035
1.6	165.	-0.	.0334	-.1957	.0000	-.2989	.0002	-.0025
1.6	170.	-0.	.0193	-.1567	.0167	-.3236	.0026	-.0030
1.6	175.	-0.	.0042	-.0982	.0091	-.3393	.0016	-.0033
1.6	180.	-0.	.0679	-.0625	.0171	-.3485	.0032	-.0020
1.6	185.	-0.	.0488	-.0306	.0193	-.3606	.0037	-.0015
1.6	190.	-0.	.0175	-.0022	.0168	-.3804	.0025	-.0001
1.6	195.	-0.	.0802	.0272	.0153	-.3953	.0019	-.0002
1.6	200.	-0.	.0458	.0461	.0139	-.3993	.0034	-.0008
1.6	205.	-0.	.0263	.0716	.0158	-.3967	.0039	.0006
1.6	210.	-0.	.0905	.1123	.0110	-.3846	.0030	.0037
1.6	215.	-0.	.0451	.1527	.0062	-.3717	.0019	.0056
1.6	220.	-0.	.0911	.2032	.0137	-.3518	.0025	.0043
1.6	225.	-0.	.0182	.2592	.0128	-.3228	.0023	.0040
1.6	230.	-0.	.5336	.2906	.0049	-.2865	.0002	.0016
1.6	235.	-0.	.4475	.3112	.0013	-.2448	.0027	-.0003
1.6	240.	-0.	.4764	.3146	-.0243	-.2133	-.0007	-.0086
1.6	245.	-0.	.3739	.3519	-.0223	-.1735	-.0037	-.0027
1.6	250.	-0.	.2788	.3717	-.0213	-.1338	-.0033	-.0043
1.6	255.	-0.	.1793	.3758	-.0252	-.0903	-.0037	-.0063
1.6	260.	-0.	.0837	.3971	-.0266	-.0633	-.0040	-.0042
1.6	265.	-0.	-.0219	.4410	-.0264	-.0377	-.0026	-.0071
1.6	270.	-0.	-.1250	.4823	-.0237	-.0145	-.0019	-.0078
1.6	275.	-0.	-.2319	.5280	-.0232	.0118	-.0026	-.0130
1.6	280.	-0.	-.3426	.5750	-.0219	.0384	-.0033	-.0104
1.6	285.	-0.	-.4638	.6277	-.0190	.0720	-.0021	-.0077
1.6	290.	-0.	-.5881	.6675	-.0152	.1056	-.0015	-.0017
1.6	295.	-0.	-.7154	.6884	-.0280	.1432	-.0022	-.0043
1.6	300.	-0.	-.8382	.7093	-.0286	.1795	-.0015	-.0071
1.6	305.	-0.	-.9353	.7265	-.0310	.1994	-.0028	-.0058
1.6	310.	-0.	-1.0187	.7207	-.0129	.2196	-.0007	-.0059
1.6	315.	-0.	-1.1011	.7119	-.0281	.2295	-.0007	-.0083
1.6	320.	-0.	-1.1878	.6972	-.0303	.2339	-.0009	-.0114
1.6	325.	-0.	-1.2483	.6610	-.0277	.2290	-.0007	-.0106
1.6	330.	-0.	-1.2753	.6165	-.0277	.2237	-.0007	-.0108
1.6	335.	-0.	-1.2637	.5673	-.0260	.2083	-.0013	-.0090
1.6	340.	-0.	-1.2557	.5204	-.0140	.1914	-.0016	-.0063
1.6	345.	-0.	-1.2073	.4690	.0029	.1661	-.0012	-.0006
1.6	350.	-0.	-1.1618	.4040	.0030	.1509	-.0018	-.0006
1.6	355.	-0.	-1.1113	.3452	-.0453	.1323	-.0039	-.0128

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-5.	-1.2412	.3670	.1589	.1544	.0289	.0115
1.5	5.	-5.	-1.2617	.3021	.1531	.1644	.0285	.0111
1.5	10.	-5.	-1.1994	.2170	.1479	.1740	.0263	.0110
1.5	15.	-5.	-1.1334	.1319	.1342	.1899	.0282	.0106
1.5	20.	-5.	-1.0234	.0209	.1533	.1849	.0237	.0147
1.5	25.	-5.	-.9259	-.0964	.1443	.1896	.0217	.0164
1.5	30.	-5.	-.8375	-.2065	.1518	.1832	.0227	.0186
1.5	35.	-5.	-.7220	-.3114	.1517	.1726	.0207	.0220
1.5	40.	-5.	-.6351	-.4116	.1519	.1789	.0217	.0206
1.5	45.	-5.	-.5426	-.4983	.1539	.1751	.0212	.0251
1.5	50.	-5.	-.4538	-.5634	.1736	.1747	.0241	.0266
1.5	55.	-5.	-.3802	-.5993	.1695	.1717	.0271	.0226
1.5	60.	-5.	-.3122	-.6238	.1559	.1672	.0293	.0151
1.5	65.	-5.	-.2335	-.6581	.1495	.1635	.0315	.0123
1.5	70.	-5.	-.1548	-.7038	.1505	.1631	.0302	.0108
1.5	75.	-5.	-.0659	-.7502	.1330	.1616	.0229	.0225
1.5	80.	-5.	.0262	-.7929	.1179	.1601	.0234	.0150
1.5	85.	-5.	.1149	-.8035	.0933	.1710	.0189	.0061
1.5	90.	-5.	.1918	-.8119	.0700	.1674	.0134	.0016
1.5	95.	-5.	.2444	-.8102	.0553	.1637	.0105	-.0036
1.5	100.	-5.	.2753	-.7969	.0716	.1614	.0092	.0044
1.5	105.	-5.	.3133	-.7879	.0644	.1584	.0097	.0073
1.5	110.	-5.	.3735	-.7732	.0946	.1452	.0092	.0085
1.5	115.	-5.	.4020	-.7408	.0589	.1371	.0093	.0123
1.5	120.	-5.	.5133	-.7337	.1306	.0965	.0066	.0265
1.5	125.	-5.	.5746	-.7365	.1491	.0607	.0095	.0331
1.5	130.	-5.	.6305	-.7864	.1620	.0491	.0119	.0334
1.5	135.	-5.	.6341	-.7403	.1567	.0107	.0148	.0107
1.5	140.	-5.	.6824	-.6637	.1243	-.0434	.0188	.0232
1.5	145.	-5.	.7553	-.5557	.1599	-.0949	.0228	.0235
1.5	150.	-5.	.8323	-.4328	.1735	-.1486	.0259	.0232
1.5	155.	-5.	.9053	-.3365	.1830	-.2125	.0282	.0218
1.5	160.	-5.	.9345	-.2589	.1934	-.2574	.0202	.0202
1.5	165.	-5.	.9347	-.1951	.1999	-.2907	.0240	.0190
1.5	170.	-5.	.9134	-.1443	.1957	-.3145	.0188	.0163
1.5	175.	-5.	.9773	-.1071	.1683	-.3285	.0244	.0131
1.5	180.	-5.	.9679	-.0701	.1641	-.3383	.0224	.0176
1.5	185.	-5.	.9482	-.0319	.1630	-.3570	.0184	.0226
1.5	190.	-5.	.9075	.0051	.1579	-.3750	.0158	.0297
1.5	195.	-5.	.8646	.0217	.1555	-.3921	.0130	.0375
1.5	200.	-5.	.8420	.0501	.1550	-.3956	.0125	.0401
1.5	205.	-5.	.8124	.0742	.1506	-.3900	.0088	.0468
1.5	210.	-5.	.7814	.1134	.1531	-.3812	.0063	.0530
1.5	215.	-5.	.7378	.1518	.1569	-.3683	.0041	.0592
1.5	220.	-5.	.6875	.1988	.1607	-.3498	.0038	.0615
1.5	225.	-5.	.6138	.2336	.1523	-.3192	.0021	.0616
1.5	230.	-5.	.5356	.2605	.1364	-.2820	.0014	.0543
1.5	235.	-5.	.4588	.2878	.1260	-.2457	.0034	.0474
1.5	240.	-5.	.4776	.3067	.1249	-.2145	.0053	.0344
1.5	245.	-5.	.3801	.3518	.1145	-.1782	.0069	.0242
1.5	250.	-5.	.2856	.3793	.1096	-.1365	.0114	.0131
1.5	255.	-5.	.1836	.3945	.1022	-.1001	.0138	.0080
1.5	260.	-5.	.0792	.4234	.0945	-.0782	.0144	.0016
1.5	265.	-5.	-.0210	.4618	.1084	-.0534	.0161	.0048
1.5	270.	-5.	-.1317	.5133	.1217	-.0274	.0180	.0079
1.5	275.	-5.	-.2584	.5786	.1228	-.0041	.0158	.0138
1.5	280.	-5.	-.3785	.6315	.1255	.0306	.0140	.0180
1.5	285.	-5.	-.4953	.6680	.1276	.0679	.0119	.0176
1.5	290.	-5.	-.6094	.6923	.1290	.1021	.0094	.0204
1.5	295.	-5.	-.7378	.7145	.1165	.1415	.0094	.0253
1.5	300.	-5.	-.8468	.7240	.0932	.1757	.0101	.0268
1.5	305.	-5.	-.9340	.7320	.0929	.1963	.0120	.0222
1.5	310.	-5.	-1.0145	.7274	.1003	.2144	.0173	.0166
1.5	315.	-5.	-1.1086	.7189	.1011	.2268	.0194	.0135
1.5	320.	-5.	-1.1842	.6977	.0971	.2297	.0205	.0082
1.5	325.	-5.	-1.2415	.6562	.1006	.2283	.0220	.0067
1.5	330.	-5.	-1.2645	.6147	.0994	.2183	.0230	.0057
1.5	335.	-5.	-1.2622	.5697	.1003	.2020	.0223	.0076
1.5	340.	-5.	-1.2465	.5251	.1025	.1870	.0220	.0098
1.5	345.	-5.	-1.2042	.4683	.1003	.1672	.0208	.0088
1.5	350.	-5.	-1.1584	.4120	.0787	.1461	.0194	.0034
1.5	355.	-5.	-1.1171	.3533	.0807	.1336	.0215	.0041

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-10.	-1.2535	.3695	.3043	.1546	.0572	.0276
1.5	5.	-10.	-1.2269	.2903	.3031	.1624	.0570	.0262
1.5	10.	-10.	-1.1769	.2078	.3080	.1742	.0546	.0249
1.5	15.	-10.	-1.1140	.1200	.3120	.1872	.0505	.0255
1.5	20.	-10.	-1.0394	.0119	.3229	.1802	.0473	.0343
1.5	25.	-10.	-.9267	-.0944	.3221	.1873	.0445	.0372
1.5	30.	-10.	-.8247	-.2072	.3099	.1902	.0420	.0372
1.5	35.	-10.	-.7342	-.3145	.3166	.1898	.0436	.0360
1.5	40.	-10.	-.6425	-.4091	.3274	.1825	.0454	.0414
1.5	45.	-10.	-.5521	-.5011	.3254	.1810	.0444	.0497
1.5	50.	-10.	-.4645	-.5945	.3265	.1851	.0456	.0502
1.5	55.	-10.	-.3894	-.6774	.3203	.1739	.0491	.0430
1.5	60.	-10.	-.3059	-.7394	.3034	.1692	.0509	.0346
1.5	65.	-10.	-.2212	-.8306	.2956	.1653	.0535	.0287
1.5	70.	-10.	-.1330	-.8984	.2890	.1551	.0470	.0285
1.5	75.	-10.	-.0364	-.9313	.2709	.1555	.0448	.0343
1.5	80.	-10.	.0456	-.9315	.2490	.1639	.0463	.0265
1.5	85.	-10.	.1139	-.9228	.2252	.1704	.0429	.0214
1.5	90.	-10.	.2021	-.8331	.1826	.1655	.0335	.0195
1.5	95.	-10.	.2470	-.8261	.1638	.1627	.0251	.0180
1.5	100.	-10.	.2926	-.8097	.1800	.1542	.0254	.0120
1.5	105.	-10.	.3440	-.7965	.1734	.1483	.0238	.0125
1.5	110.	-10.	.3800	-.7655	.1554	.1334	.0140	.0161
1.5	115.	-10.	.4267	-.7349	.1169	.1231	.0123	.0184
1.5	120.	-10.	.4239	-.7305	.2518	.0728	.0187	.0454
1.5	125.	-10.	.6355	-.7869	.2743	.0398	.0210	.0519
1.5	130.	-10.	.6793	-.7800	.3057	.0154	.0249	.0550
1.5	135.	-10.	.6103	-.7573	.3055	.0315	.0274	.0392
1.5	140.	-10.	.7030	-.6705	.3050	-.0480	.0355	.0462
1.5	145.	-10.	.7337	-.5762	.3169	-.0942	.0438	.0434
1.5	150.	-10.	.6609	-.4943	.3381	-.1434	.0467	.0424
1.5	155.	-10.	.9394	-.3775	.3620	-.2073	.0540	.0409
1.5	160.	-10.	.9516	-.2455	.3643	-.2535	.0529	.0377
1.5	165.	-10.	.9647	-.2191	.3587	-.2875	.0489	.0350
1.5	170.	-10.	1.0034	-.1769	.3409	-.3077	.0460	.0244
1.5	175.	-10.	.9955	-.1294	.3096	-.3171	.0455	.0257
1.5	180.	-10.	.9790	-.0780	.2975	-.3325	.0393	.0352
1.5	185.	-10.	.9479	-.0276	.2953	-.3494	.0336	.0429
1.5	190.	-10.	.9083	.0179	.2873	-.3657	.0272	.0528
1.5	195.	-10.	.8773	.0366	.2883	-.3859	.0224	.0644
1.5	200.	-10.	.8542	.0614	.2879	-.3984	.0173	.0761
1.5	205.	-10.	.8281	.0930	.2928	-.3979	.0155	.0846
1.5	210.	-10.	.7919	.1259	.2943	-.3852	.0132	.0937
1.5	215.	-10.	.7481	.1554	.2912	-.3695	.0097	.1027
1.5	220.	-10.	.6935	.1844	.2901	-.3494	.0071	.1101
1.5	225.	-10.	.6244	.2209	.2832	-.3203	.0056	.1115
1.5	230.	-10.	.5438	.2515	.2662	-.2868	.0051	.1036
1.5	235.	-10.	.4710	.2752	.2391	-.2463	.0059	.0893
1.5	240.	-10.	.4914	.2993	.2787	-.2157	.0146	.0746
1.5	245.	-10.	.3901	.3446	.2669	-.1794	.0230	.0572
1.5	250.	-10.	.2871	.3827	.2504	-.1450	.0264	.0443
1.5	255.	-10.	.1814	.4177	.2367	-.1157	.0298	.0360
1.5	260.	-10.	.0748	.4624	.2451	-.0999	.0342	.0285
1.5	265.	-10.	-.0370	.5120	.2567	-.0759	.0348	.0290
1.5	270.	-10.	-.1499	.5587	.2728	-.0438	.0349	.0348
1.5	275.	-10.	-.2660	.6029	.2817	-.0081	.0333	.0411
1.5	280.	-10.	-.3816	.6428	.2822	.0219	.0294	.0495
1.5	285.	-10.	-.5026	.6809	.2694	.0562	.0235	.0558
1.5	290.	-10.	-.6331	.7088	.2590	.0961	.0194	.0609
1.5	295.	-10.	-.7454	.7152	.2456	.1377	.0177	.0636
1.5	300.	-10.	-.8494	.7260	.2235	.1715	.0194	.0583
1.5	305.	-10.	-.9364	.7303	.2184	.1955	.0249	.0509
1.5	310.	-10.	-1.0132	.7269	.2240	.2123	.0336	.0409
1.5	315.	-10.	-1.0991	.7142	.2346	.2218	.0391	.0362
1.5	320.	-10.	-1.1701	.6891	.2355	.2253	.0424	.0311
1.5	325.	-10.	-1.2224	.6523	.2383	.2202	.0456	.0290
1.5	330.	-10.	-1.2361	.6060	.2337	.2090	.0463	.0256
1.5	335.	-10.	-1.2356	.5631	.2294	.1941	.0461	.0263
1.5	340.	-10.	-1.2254	.5216	.2260	.1811	.0463	.0249
1.5	345.	-10.	-1.1948	.4696	.2224	.1632	.0455	.0227
1.5	350.	-10.	-1.1508	.4076	.2159	.1493	.0450	.0202
1.5	355.	-10.	-1.0960	.3492	.2091	.1324	.0456	.0193

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-15.	-1.2402	.3621	.4522	.1510	.0855	.0461
1.5	5.	-15.	-1.2118	.2802	.4011	.1620	.0840	.0459
1.5	10.	-15.	-1.1637	.2013	.4637	.1739	.0801	.0452
1.5	15.	-15.	-1.1119	.1042	.4709	.1894	.0763	.0460
1.5	20.	-15.	-1.0282	-.0105	.4629	.2033	.0722	.0471
1.5	25.	-15.	-.9837	-.1071	.4769	.2025	.0706	.0543
1.5	30.	-15.	-.8327	-.2013	.4801	.1983	.0686	.0533
1.5	35.	-15.	-.7350	-.2988	.4755	.1884	.0609	.0503
1.5	40.	-15.	-.6444	-.3956	.4759	.1834	.0655	.0597
1.5	45.	-15.	-.5645	-.4795	.4714	.1878	.0652	.0676
1.5	50.	-15.	-.4749	-.5551	.4532	.1876	.0603	.0662
1.5	55.	-15.	-.4012	-.6615	.4513	.1843	.0577	.0587
1.5	60.	-15.	-.2951	-.7057	.4323	.1694	.0655	.0484
1.5	65.	-15.	-.1948	-.6117	.4241	.1575	.0634	.0529
1.5	70.	-15.	-.1243	-.8066	.4337	.1503	.0640	.0563
1.5	75.	-15.	-.0339	-.7223	.3940	.1536	.0613	.0401
1.5	80.	-15.	.0537	-.7823	.3755	.1554	.0649	.0365
1.5	85.	-15.	.1285	-.8187	.3346	.1644	.0549	.0269
1.5	90.	-15.	.2054	-.8296	.2909	.1627	.0488	.0188
1.5	95.	-15.	.2903	-.8192	.2734	.1548	.0434	.0174
1.5	100.	-15.	.3235	-.8105	.2301	.1397	.0424	.0194
1.5	105.	-15.	.3715	-.7924	.2890	.1351	.0418	.0137
1.5	110.	-15.	.4153	-.7687	.2594	.1243	.0394	.0198
1.5	115.	-15.	.4447	-.7310	.2258	.1128	.0301	.0229
1.5	120.	-15.	.5018	-.7434	.1762	.0595	.0322	.0203
1.5	125.	-15.	.6275	-.7779	.4032	.0180	.0347	.0033
1.5	130.	-15.	.7119	-.7705	.4346	-.0195	.0377	.0058
1.5	135.	-15.	.6745	-.7367	.4772	-.0148	.0445	.0066
1.5	140.	-15.	.7233	-.6722	.4903	-.0560	.0553	.0087
1.5	145.	-15.	.8193	-.5833	.4473	-.1084	.0635	.0009
1.5	150.	-15.	.8336	-.5154	.5173	-.1534	.0688	.0047
1.5	155.	-15.	.9554	-.4285	.5360	-.1982	.0736	.0010
1.5	160.	-15.	.9309	-.3342	.5501	-.2459	.0741	.0595
1.5	165.	-15.	.9356	-.2494	.5524	-.2802	.0732	.0544
1.5	170.	-15.	1.0127	-.2077	.4954	-.2935	.0645	.0438
1.5	175.	-15.	1.0010	-.1461	.4717	-.3096	.0591	.0496
1.5	180.	-15.	.9851	-.0865	.4591	-.3283	.0539	.0580
1.5	185.	-15.	.9607	-.0288	.4560	-.3481	.0496	.0685
1.5	190.	-15.	.9231	.0286	.4537	-.3667	.0434	.0801
1.5	195.	-15.	.8909	.0686	.4582	-.3837	.0387	.0926
1.5	200.	-15.	.8702	.0877	.4715	-.3970	.0340	.1103
1.5	205.	-15.	.8509	.1089	.4643	-.3995	.0271	.1278
1.5	210.	-15.	.8061	.1337	.4492	-.3861	.0212	.1373
1.5	215.	-15.	.7509	.1601	.4380	-.3696	.0161	.1475
1.5	220.	-15.	.7000	.1828	.4293	-.3475	.0137	.1544
1.5	225.	-15.	.6367	.2218	.4195	-.3210	.0138	.1534
1.5	230.	-15.	.5741	.2677	.4057	-.2927	.0156	.1450
1.5	235.	-15.	.4976	.2856	.3846	-.2531	.0184	.1297
1.5	240.	-15.	.5047	.2896	.4344	-.2169	.0279	.1143
1.5	245.	-15.	.3970	.3581	.4220	-.1830	.0356	.0971
1.5	250.	-15.	.2876	.3984	.3999	-.1536	.0443	.0805
1.5	255.	-15.	.1855	.4450	.3802	-.1349	.0454	.0708
1.5	260.	-15.	.0724	.4942	.3851	-.1147	.0479	.0648
1.5	265.	-15.	-.0458	.5375	.3987	-.0870	.0490	.0669
1.5	270.	-15.	-.1672	.5923	.4052	-.0564	.0490	.0705
1.5	275.	-15.	-.2769	.6315	.4026	-.0201	.0461	.0734
1.5	280.	-15.	-.3802	.6676	.4034	.0158	.0420	.0787
1.5	285.	-15.	-.5034	.6943	.4090	.0484	.0376	.0883
1.5	290.	-15.	-.6217	.7132	.3952	.0845	.0331	.0960
1.5	295.	-15.	-.7411	.7224	.3687	.1257	.0293	.0979
1.5	300.	-15.	-.8403	.7289	.3541	.1621	.0318	.0912
1.5	305.	-15.	-.9253	.7321	.3506	.1893	.0403	.0770
1.5	310.	-15.	-.9994	.7228	.3580	.2058	.0489	.0684
1.5	315.	-15.	-1.0801	.7075	.3663	.2159	.0558	.0622
1.5	320.	-15.	-1.1430	.6797	.3701	.2189	.0617	.0563
1.5	325.	-15.	-1.1914	.6401	.3662	.2145	.0656	.0511
1.5	330.	-15.	-1.2019	.5986	.3645	.2007	.0684	.0480
1.5	335.	-15.	-1.2067	.5562	.3558	.1892	.0683	.0446
1.5	340.	-15.	-1.2012	.5146	.3507	.1762	.0683	.0424
1.5	345.	-15.	-1.1741	.4607	.3490	.1622	.0693	.0405
1.5	350.	-15.	-1.1263	.3964	.3402	.1466	.0680	.0389
1.5	355.	-15.	-1.0795	.3459	.3305	.1349	.0676	.0369

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_ℓ
1.5	0.	-30.	-1.0741	.2855	.9321	.1496	.1490	.1220
1.5	5.	-30.	-1.0543	.2203	.9036	.1578	.1484	.1249
1.5	10.	-30.	-1.0346	.1464	.8128	.1615	.1401	.1254
1.5	15.	-30.	-.9483	.0651	.8318	.1649	.1441	.1249
1.5	20.	-30.	-.8802	-.0223	.8345	.1682	.1403	.1319
1.5	25.	-30.	-.7952	-.1139	.8297	.1706	.1352	.1307
1.5	30.	-30.	-.7004	-.2082	.8160	.1720	.1311	.1245
1.5	35.	-30.	-.6113	-.3129	.8121	.1798	.1301	.1240
1.5	40.	-30.	-.5214	-.4059	.8031	.1852	.1272	.1271
1.5	45.	-30.	-.4427	-.4824	.8236	.1898	.1220	.1280
1.5	50.	-30.	-.3611	-.5595	.8140	.1831	.1190	.1286
1.5	55.	-30.	-.2914	-.6104	.8018	.1944	.1199	.1268
1.5	60.	-30.	-.2113	-.6401	.8457	.1882	.1213	.1231
1.5	65.	-30.	-.1136	-.7407	.8544	.1853	.1164	.1127
1.5	70.	-30.	-.0267	-.7751	.8126	.1810	.1152	.0978
1.5	75.	-30.	.0574	-.7985	.7657	.1736	.1130	.0835
1.5	80.	-30.	.1336	-.8042	.7150	.1637	.1074	.0713
1.5	85.	-30.	.2033	-.8065	.6759	.1562	.1051	.0572
1.5	90.	-30.	.2634	-.7995	.6217	.1475	.1012	.0508
1.5	95.	-30.	.3135	-.7875	.5253	.1394	.0984	.0407
1.5	100.	-30.	.3557	-.7685	.5890	.1311	.0926	.0342
1.5	105.	-30.	.3818	-.7499	.5613	.1275	.0855	.0321
1.5	110.	-30.	.4034	-.7341	.5531	.1216	.0826	.0351
1.5	115.	-30.	.4234	-.7214	.5584	.1151	.0830	.0323
1.5	120.	-30.	.3101	-.6893	.7169	.1190	.0764	.0912
1.5	125.	-30.	.3383	-.6174	.7171	.0932	.0863	.0893
1.5	130.	-30.	.3727	-.5573	.7225	.0600	.0837	.0978
1.5	135.	-30.	.4279	-.4944	.7441	.0171	.0894	.1050
1.5	140.	-30.	.4932	-.4210	.7059	-.0335	.0954	.1033
1.5	145.	-30.	.5561	-.3502	.7760	-.0829	.0967	.1113
1.5	150.	-30.	.6103	-.2827	.7819	-.1277	.0985	.1037
1.5	155.	-30.	.6546	-.2174	.7857	-.1718	.0995	.1117
1.5	160.	-30.	.6933	-.1515	.7960	-.2189	.0988	.1155
1.5	165.	-30.	.7418	-.1055	.8032	-.2614	.0946	.1171
1.5	170.	-30.	.7770	-.0483	.8040	-.3002	.0871	.1224
1.5	175.	-30.	.8153	-.0145	.8044	-.3343	.0819	.1206
1.5	180.	-30.	.9317	-.0004	.7938	-.3641	.0801	.1196
1.5	185.	-30.	.9085	.0414	.7552	-.3684	.0730	.1245
1.5	190.	-30.	.8815	.0761	.7130	-.3793	.0640	.1345
1.5	195.	-30.	.8617	.0994	.7061	-.3878	.0587	.1486
1.5	200.	-30.	.8497	.1472	.7087	-.3903	.0552	.1637
1.5	205.	-30.	.8204	.1517	.7168	-.3818	.0514	.1800
1.5	210.	-30.	.8070	.1758	.7390	-.3801	.0495	.2007
1.5	215.	-30.	.7746	.2078	.7780	-.3640	.0483	.2269
1.5	220.	-30.	.7752	.2194	.8078	-.3661	.0481	.2413
1.5	225.	-30.	.7195	.2568	.8250	-.3430	.0504	.2468
1.5	230.	-30.	.6551	.2871	.8338	-.3166	.0534	.2458
1.5	235.	-30.	.5810	.3205	.8269	-.2809	.0584	.2374
1.5	240.	-30.	.6414	.2756	.9455	-.2488	.0787	.2423
1.5	245.	-30.	.5321	.3267	.9263	-.2112	.0827	.2268
1.5	250.	-30.	.4304	.3807	.8949	-.1863	.0870	.2093
1.5	255.	-30.	.3210	.4364	.8974	-.1650	.0902	.2039
1.5	260.	-30.	.1906	.4905	.8828	-.1391	.0892	.1989
1.5	265.	-30.	.0698	.5508	.8697	-.1187	.0891	.1963
1.5	270.	-30.	-.0677	.6035	.8595	-.0898	.0900	.1942
1.5	275.	-30.	-.2086	.6506	.8534	-.0561	.0922	.1986
1.5	280.	-30.	-.3239	.6787	.8504	-.0265	.0935	.2002
1.5	285.	-30.	-.4418	.6968	.8684	.0111	.0945	.2055
1.5	290.	-30.	-.5380	.7027	.8619	.0403	.0942	.2062
1.5	295.	-30.	-.6333	.7091	.8892	.0768	.0992	.2109
1.5	300.	-30.	-.7012	.6945	.8888	.1080	.1005	.2119
1.5	305.	-30.	-.7885	.6909	.8948	.1295	.1056	.2075
1.5	310.	-30.	-.8671	.6752	.8975	.1504	.1091	.2039
1.5	315.	-30.	-.9328	.6432	.8954	.1642	.1138	.1967
1.5	320.	-30.	-1.0012	.6172	.8859	.1744	.1209	.1860
1.5	325.	-30.	-1.0207	.5708	.8542	.1688	.1244	.1730
1.5	330.	-30.	-1.0431	.5327	.8402	.1590	.1305	.1575
1.5	335.	-30.	-1.0632	.4947	.8318	.1594	.1337	.1489
1.5	340.	-30.	-1.0757	.4604	.8276	.1567	.1369	.1398
1.5	345.	-30.	-1.0668	.4185	.8097	.1550	.1370	.1323
1.5	350.	-30.	-1.0468	.3682	.8005	.1543	.1388	.1269
1.5	355.	-30.	-1.0188	.3122	.7981	.1556	.1389	.1248

HALF SCALE F-106 EJECTION SEAT AERODYNAMIC COEFFICIENTS
HANDS ON ARMREST
ROCKET ON
(CONTINUED)

M	α	β	C_X	C_Z	C_Y	C_m	C_n	C_l
1.6	0.	-45.	-.3701	.2505	1.2360	.1056	.1999	.2205
1.6	5.	-45.	-.3544	.1965	1.2913	.1154	.1996	.2176
1.6	10.	-45.	-.3395	.1370	1.2813	.1274	.1933	.2140
1.6	15.	-45.	-.7937	.0714	1.2657	.1359	.1991	.2043
1.6	20.	-45.	-.7382	.0145	1.2647	.1431	.1926	.2018
1.6	25.	-45.	-.6635	-.0537	1.2549	.1344	.1907	.1929
1.6	30.	-45.	-.5994	-.1339	1.2466	.1428	.1866	.1858
1.6	35.	-45.	-.5274	-.2211	1.2598	.1493	.1844	.1841
1.6	40.	-45.	-.4442	-.3037	1.2561	.1544	.1786	.1846
1.6	45.	-45.	-.3723	-.3775	1.2413	.1567	.1726	.1826
1.6	50.	-45.	-.2919	-.4469	1.2268	.1573	.1685	.1799
1.6	55.	-45.	-.2033	-.5015	1.2148	.1619	.1696	.1739
1.6	60.	-45.	-.1417	-.5539	1.1997	.1635	.1638	.1659
1.6	65.	-45.	-.0588	-.5957	1.1951	.1612	.1607	.1518
1.6	70.	-45.	.0089	-.6275	1.1291	.1574	.1504	.1415
1.6	75.	-45.	.0737	-.6572	1.1031	.1545	.1562	.1270
1.6	80.	-45.	.1436	-.6784	1.0618	.1495	.1530	.1125
1.6	85.	-45.	.1943	-.6757	1.0520	.1381	.1485	.1221
1.6	90.	-45.	.2521	-.6724	.9819	.1202	.1407	.0883
1.6	95.	-45.	.2945	-.6671	.9434	.1152	.1441	.0702
1.6	100.	-45.	.3381	-.6494	.9134	.1081	.1402	.0647
1.6	105.	-45.	.3682	-.6264	.8830	.0973	.1343	.0586
1.6	110.	-45.	.3907	-.6078	.8582	.0859	.1306	.0551
1.6	115.	-45.	.4302	-.5928	.8660	.0755	.1283	.0566
1.6	120.	-45.	.4007	-.6445	1.0225	.0659	.1215	.1134
1.6	125.	-45.	.4584	-.6080	1.0352	.0339	.1220	.1126
1.6	130.	-45.	.4367	-.5864	1.0504	.0133	.1228	.1186
1.6	135.	-45.	.5338	-.5215	1.0608	-.0148	.1233	.1241
1.6	140.	-45.	.5375	-.4654	1.0773	-.0515	.1221	.1328
1.6	145.	-45.	.6537	-.4186	1.0917	-.0931	.1218	.1438
1.6	150.	-45.	.7120	-.3643	1.1000	-.1330	.1199	.1475
1.6	155.	-45.	.7034	-.3183	1.1107	-.1687	.1179	.1548
1.6	160.	-45.	.7807	-.2580	1.1158	-.1866	.1174	.1600
1.6	165.	-45.	.8426	-.2162	1.1105	-.2307	.1102	.1655
1.6	170.	-45.	.8940	-.1674	1.0958	-.2604	.1123	.1692
1.6	175.	-45.	.8497	-.0962	1.0575	-.2732	.1046	.1722
1.6	180.	-45.	.8402	-.0392	1.0420	-.2947	.1018	.1811
1.6	185.	-45.	.8286	.0106	1.0243	-.3092	.0952	.1884
1.6	190.	-45.	.8139	.0596	1.0141	-.3213	.0849	.1977
1.6	195.	-45.	.7961	.0983	1.0109	-.3286	.0855	.2078
1.6	200.	-45.	.7613	.1384	1.0104	-.3245	.0882	.2227
1.6	205.	-45.	.7571	.1605	1.0206	-.3291	.0765	.2409
1.6	210.	-45.	.7377	.1977	1.0367	-.3245	.0741	.2580
1.6	215.	-45.	.7018	.2179	1.0421	-.3140	.0715	.2693
1.6	220.	-45.	.6715	.2385	1.0508	-.3030	.0703	.2804
1.6	225.	-45.	.6332	.2519	1.0636	-.2830	.0724	.2892
1.6	230.	-45.	.5820	.2608	1.0811	-.2598	.0749	.2972
1.6	235.	-45.	.5125	.2846	1.1016	-.2320	.0781	.2995
1.6	240.	-45.	.5853	.2341	1.2281	-.2126	.0984	.3194
1.6	245.	-45.	.4870	.2865	1.2342	-.1838	.1033	.3150
1.6	250.	-45.	.4065	.3277	1.2428	-.1629	.1088	.3119
1.6	255.	-45.	.3010	.3711	1.2452	-.1341	.1116	.3096
1.6	260.	-45.	.2012	.4157	1.2328	-.1113	.1123	.3065
1.6	265.	-45.	.0992	.4590	1.2294	-.0893	.1139	.3100
1.6	270.	-45.	-.0067	.4979	1.2248	-.0671	.1157	.3137
1.6	275.	-45.	-.1097	.5271	1.2203	-.0452	.1168	.3138
1.6	280.	-45.	-.1906	.5479	1.2238	-.0262	.1235	.3149
1.6	285.	-45.	-.2920	.5662	1.2239	-.0035	.1286	.3145
1.6	290.	-45.	-.3731	.5723	1.2405	.0158	.1341	.3133
1.6	295.	-45.	-.4335	.5669	1.2489	.0322	.1438	.3122
1.6	300.	-45.	-.5097	.5637	1.2719	.0501	.1502	.3138
1.6	305.	-45.	-.5834	.5571	1.2867	.0678	.1581	.3099
1.6	310.	-45.	-.6442	.5395	1.2892	.0799	.1618	.3065
1.6	315.	-45.	-.7064	.5273	1.2857	.0911	.1663	.2978
1.6	320.	-45.	-.7608	.5006	1.2806	.1031	.1695	.2893
1.6	325.	-45.	-.8059	.4684	1.2759	.1144	.1717	.2842
1.6	330.	-45.	-.8275	.4410	1.2602	.1178	.1738	.2759
1.6	335.	-45.	-.8375	.4067	1.2445	.1210	.1754	.2642
1.6	340.	-45.	-.8430	.3681	1.2276	.1290	.1771	.2524
1.6	345.	-45.	-.8384	.3260	1.2088	.1324	.1787	.2420
1.6	350.	-45.	-.8197	.2795	1.2107	.1331	.1846	.2327
1.6	355.	-45.	-.7967	.2307	1.1922	.1380	.1845	.2256

*U.S.Government Printing Office: 1974 — 657-013/92